Grade 4

Evan-Moor

EMC 3017

BASIC Math Skills GRADE 4

Correlated to State and Common Core State Standards

- Aligned with NCTM Standards
  - Number & Operations
  - Algebra
  - Geometry
  - Measurement
  - Data Analysis & Probability
- Reproducible pages for:
  - Drill & practice
  - Applications & word problems
  - Math tests
- Test prep
- Timed tests
- Reproducible flashcards

PRIMES . . FACTORS . . NUMBER LINES . . CHANCE

CUSTOMARY & METRIC UNITS . . AREA . . GRAPHS

Enhanced E-book

BASIC Math Skills GRADE 4

Basic Math Skills is divided into the following sections, which correspond to the strands of the NCTM content standards:

- Number and Operations
- Algebra
- Geometry
- Measurement
- Data Analysis and Probability

Each section includes a variety of reproducible pages that reinforce basic math skills taught at the fourth-grade level. These pages include:

- Games, puzzles, and mazes
- Drill and practice pages
- Problem solving and application practice
- Tests in standardized format

Also included is a resource section of materials that may be used to monitor, reinforce, and assess learning:

- Timed math tests
- Class record sheet
- Test answer form
- Awards
- Reproducible practice cards for multiplication and division facts

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Correlated to State and Common Core State Standards

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Table of Contents

Introduction

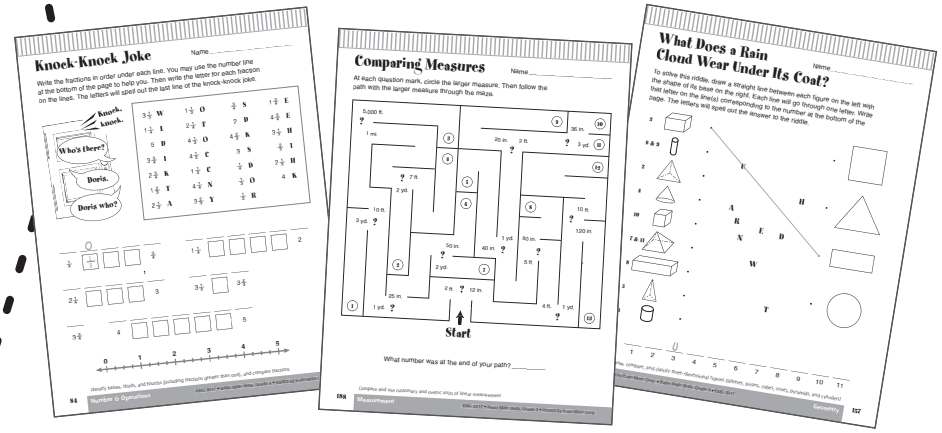
Basic Math Skills is based on current NCTM standards and is designed to support any math curriculum that you may be using in your classroom. The standard strands (Number and Operations, Algebra, Geometry, Measurement, and Data Analysis and Probability) and skills within the strand are listed on the overview page for each section of the book. The skill is also shown at the bottom of each reproducible page.

Opportunities to practice the process standards (Problem Solving, Reasoning and Proof, Communication, Connections, and Representations) are also provided as students complete the various types of activities in this resource book.

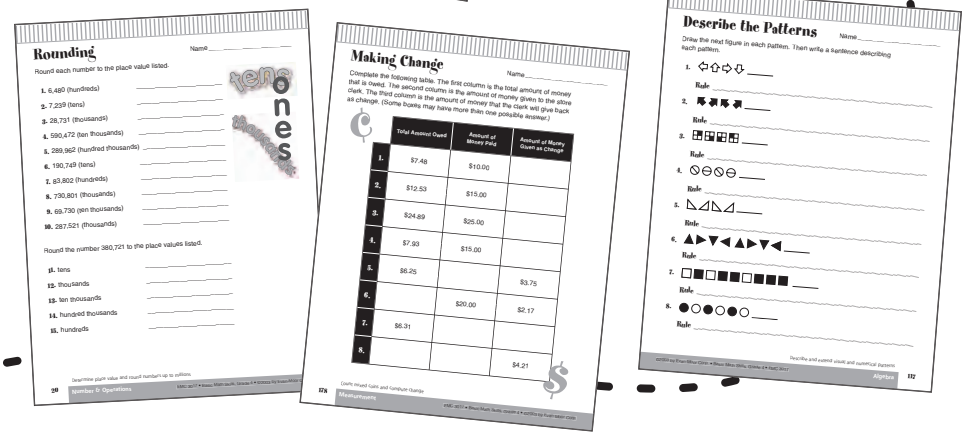
Basic Math Skills is to be used as a resource providing practice of skills already introduced to students. Any page may be used with an individual child, as homework, with a small group, or by the whole class.

Skill Practice

Each skill is covered in a set of six reproducible pages that include the following:



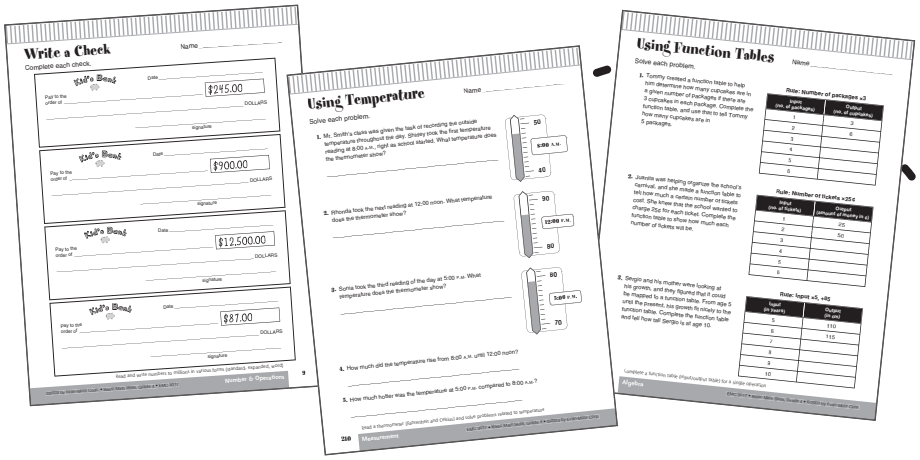
"Fun" Activities
Students use the skill to complete riddles, mazes, codes, and other game-oriented activities.

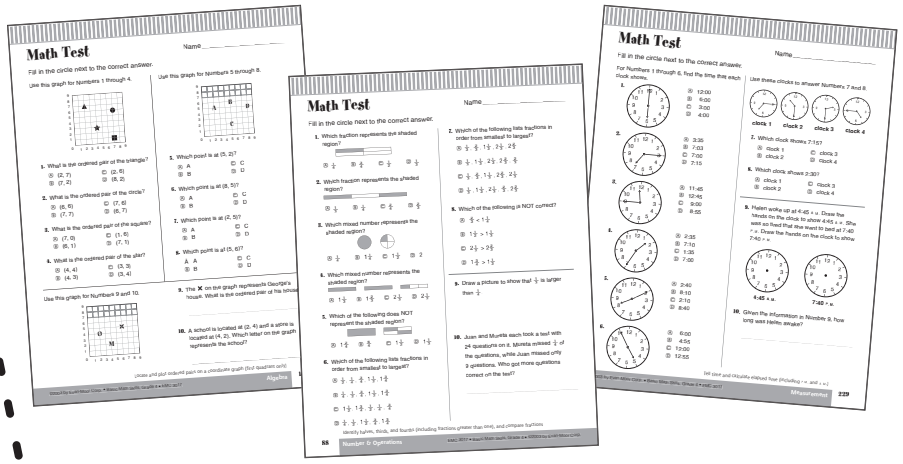


Drill and Practice
These pages contain straightforward practice of the skill.

Application/Word Problem Activities

Students use the skill to problem solve and explore real-life situations.





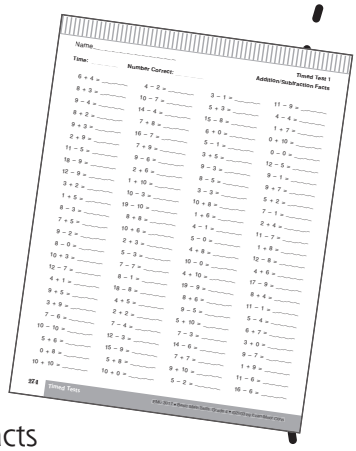
Math Tests

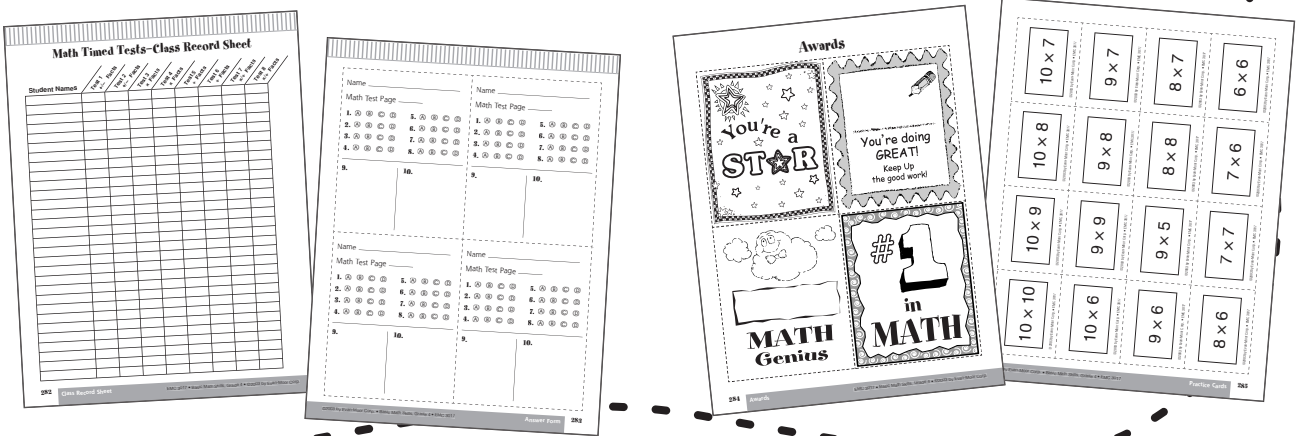
A test in standardized format is provided for each skill.

Additional Resources

The following additional resources are also provided:

- Timed math tests
- Class record sheet
- Test answer form
- Awards
- Reproducible practice cards for multiplication and division facts





Number and Operations

Where Do Fish Sleep?

Name _____

Match the word form to the standard form for each number. Then write the corresponding letter in the blank. Read the answer to the riddle from top to bottom.

___I___	ten thousand twenty-five	376 **T**
_____	thirty-five thousand three hundred fifty	8,047 **W**
_____	eight thousand forty-seven	4,006 **E**
_____	seventy-two thousand three hundred	72,300 **A**
_____	three hundred seventy-six	7,230 **D**
_____	five hundred thousand eight	10,025 **I**
_____	eight hundred forty-seven	500,008 **E**
_____	three thousand five hundred thirty-five	13,025 **S**
_____	four thousand six	35,350 **N**
_____	seven thousand two hundred thirty	3,535 **B**
_____	thirteen thousand twenty-five	847 **R**

Read and write numbers to millions in various forms (standard, expanded, word)

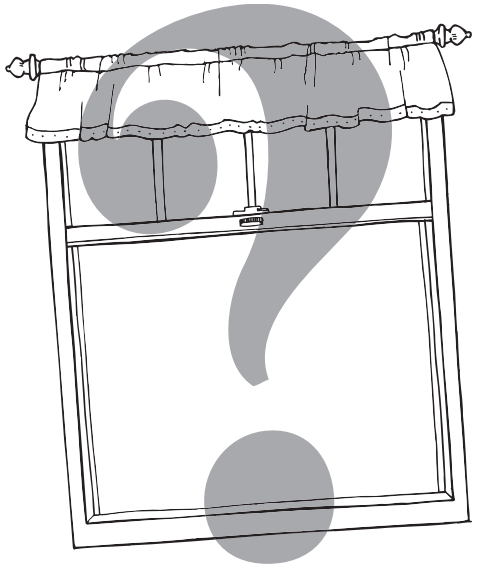
What Kind of Room Has No Windows?

Name _____

Match the expanded form to the standard form. Then write the corresponding letter in the blank. Read the answer to the riddle from top to bottom.

A	300 + 40
_____	200 + 70
_____	2,000 + 700
_____	20,000 + 7,000
_____	3,000 + 40
_____	2,000 + 70
_____	30,000 + 4,000
_____	200 + 7
_____	3,000 + 400

270	M
34,000	O
2,070	R
3,040	H
2,700	U
340	A
3,400	M
27,000	S
207	O



Read and write numbers to millions in various forms (standard, expanded, word)

The Name Is the Same

Name _____

Write each number in word form.

1. 5,000 _____
2. 45,000 _____
3. 3,700 _____
4. 5,835 _____
5. 13,900 _____
6. 497 _____
7. 152,100 _____
8. 4,008 _____

Write each number in standard form.

9. four hundred sixty-eight _____
10. eight thousand three _____
11. six thousand twenty-five _____
12. nine hundred two _____
13. four hundred sixty-one _____
14. five hundred twenty-six thousand _____
15. forty thousand six _____
16. eighty-three thousand two hundred sixty-seven _____

Read and write numbers to millions in various forms (standard, expanded, word)

Different Forms

Name _____

Write each number in standard form.

1. 5,000 + 60 + 3 = _____
2. 7,000 + 700 = _____
3. 7,000 + 80 + 9 = _____
4. 10,000 + 900 + 6 = _____
5. 300,000 + 80,000 + 4,000 + 300 + 20 + 8 = _____
6. 800 + 90 = _____
7. 40,000 + 600 = _____
8. 80,000 + 7,000 + 500 + 40 + 9 = _____
9. 800 + 3 = _____
10. 90,000 + 90 + 9 = _____

Write each number in expanded form.

11. 4,500 _____
12. 35,000 _____
13. 692 _____
14. 1,090 _____
15. 5,038 _____
16. 6,030 _____
17. 14,972 _____
18. 280,000 _____

Read and write numbers to millions in various forms (standard, expanded, word)

Write a Check

Name _____

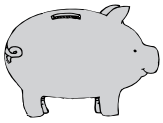
Complete each check.

Kid's Bank

Date _____

Pay to the order of _____ $245.00

_____ DOLLARS



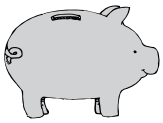
_____
signature

Kid's Bank

Date _____

Pay to the order of _____ $900.00

_____ DOLLARS



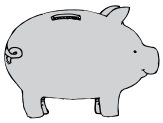
_____
signature

Kid's Bank

Date _____

Pay to the order of _____ $12,500.00

_____ DOLLARS



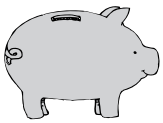
_____
signature

Kid's Bank

Date _____

Pay to the order of _____ $87.00

_____ DOLLARS



_____
signature

Read and write numbers to millions in various forms (standard, expanded, word)

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, find the standard form.

1. two thousand nine hundred

Ⓐ 29 Ⓒ 2,900
Ⓑ 2,009 Ⓓ 290

2. seventy-two

Ⓐ 702 Ⓒ 720
Ⓑ 72 Ⓓ 72,000

3. five hundred

Ⓐ 500 Ⓒ 5,100
Ⓑ 5 Ⓓ 100

4. six thousand four hundred ninety

Ⓐ 6,090 Ⓒ 6,400
Ⓑ 490 Ⓓ 6,490

For Numbers 5 through 8, find the word form.

5. 40,600

Ⓐ four thousand six hundred
Ⓑ forty thousand six hundred
Ⓒ forty-six hundred
Ⓓ forty thousand six

6. 7,200

Ⓐ seven thousand
Ⓑ seventy-two thousand
Ⓒ seven thousand two hundred
Ⓓ seven thousand two

7. 649

Ⓐ six hundred forty-nine
Ⓑ six thousand forty-nine
Ⓒ six four nine
Ⓓ nine hundred forty-six

8. 820

Ⓐ eighty-two
Ⓑ eight thousand twenty
Ⓒ eight thousand two hundred
Ⓓ eight hundred twenty

---

9. Write this number in standard form.

twenty-three thousand ninety-seven

_____

10. Write this number in word form.

5,973

_____

_____

_____

Read and write numbers to millions in various forms (standard, expanded, word)

Riddle Time

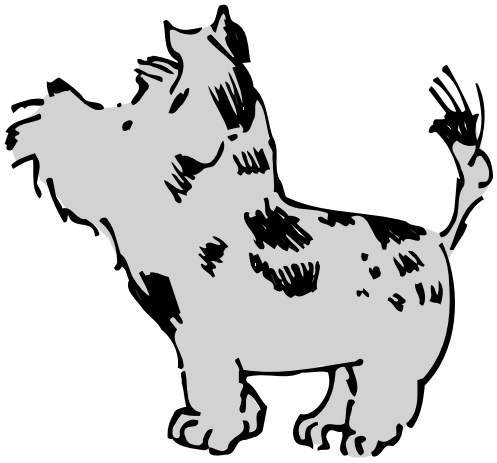
Name _____

List the numbers in the box in order from smallest to largest. If you need help, use the number line at the bottom of the page. Then write the corresponding letters in the blanks. Read the answer from top to bottom.

What do you get if you put a dog in the oven?

smallest	1¼	A
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
largest	_____	_____

1.5	H
3.75	O
2	O
$1\frac{1}{4}$	A
$2\frac{1}{2}$	T
$4\frac{1}{2}$	G
2.75	D

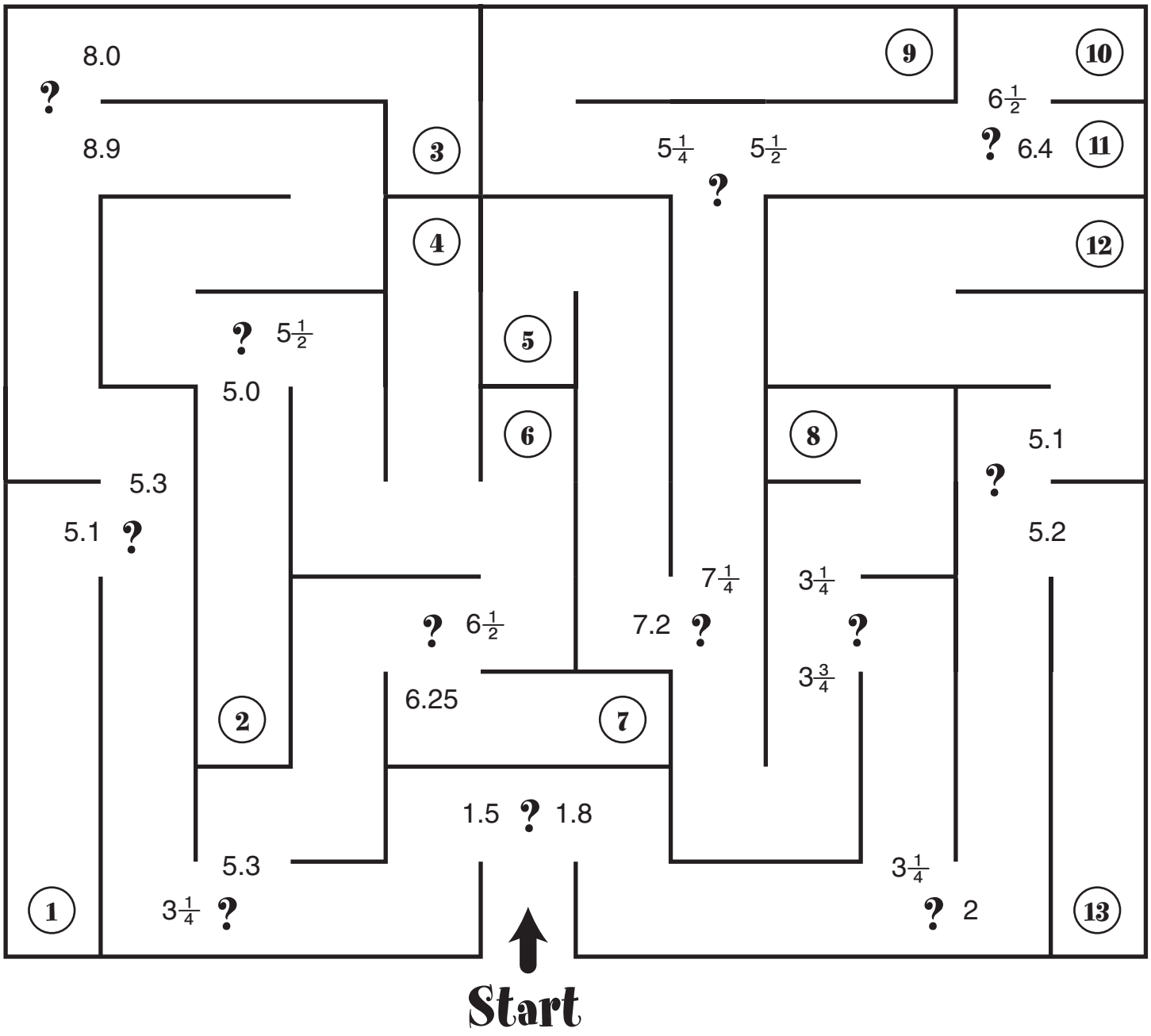


Compare and order numbers (including decimals to hundredths and mixed numbers)

A-Maze-ing!

Name _____

At each question mark, circle the larger number. Then follow the path with the larger number through the maze.



What number was at the end of your path? _____

Compare and order numbers (including decimals to hundredths and mixed numbers)

Largest and Smallest

Name _____

List these numbers in order from least to greatest.

1.	256	842	309	764	310	299
	_____	_____	_____	_____	_____	_____
2.	673	674	575	769	599	672
	_____	_____	_____	_____	_____	_____
3.	77.5	7.85	80.3	80.29	74.5	79.4
	_____	_____	_____	_____	_____	_____

List these numbers in order from largest to smallest.

4.	490	443	485	479	497	482
	_____	_____	_____	_____	_____	_____
5.	1,008	1,990	1,010	998	2,000	2,001
	_____	_____	_____	_____	_____	_____
6.	10.8	1.9	9.9	8.9	9.2	10.6
	_____	_____	_____	_____	_____	_____
7.	4.53	4.51	4.44	4.32	4.61	4.62
	_____	_____	_____	_____	_____	_____
8.	42	48.5	48.49	47.0	46.99	43.5	48.43
	_____	_____	_____	_____	_____	_____	_____

Compare and order numbers (including decimals to hundredths and mixed numbers)

What's the Order?

Name _____

List these numbers in order from least to greatest.

1.	489	526	500	509	490	492
	_____	_____	_____	_____	_____	_____
2.	602	596	597	524	623	635
	_____	_____	_____	_____	_____	_____
3.	10	$9\frac{5}{8}$	$8\frac{2}{3}$	9	$8\frac{1}{2}$	$10\frac{1}{2}$
	_____	_____	_____	_____	_____	_____

List these numbers in order from largest to smallest.

4.	800	804	790	791	802	809
	_____	_____	_____	_____	_____	_____
5.	2,006	1,098	1,990	1,987	2,900	2,009
	_____	_____	_____	_____	_____	_____
6.	$10\frac{1}{2}$	$9\frac{1}{2}$	10	$8\frac{1}{2}$	$8\frac{3}{4}$	$10\frac{1}{4}$
	_____	_____	_____	_____	_____	_____
7.	$4\frac{3}{4}$	$5\frac{1}{2}$	$3\frac{3}{4}$	$3\frac{1}{4}$	$5\frac{1}{4}$	$4\frac{1}{2}$
	_____	_____	_____	_____	_____	_____
8.	$7\frac{3}{4}$	$5\frac{1}{2}$	$6\frac{3}{4}$	$5\frac{1}{4}$	$5\frac{3}{4}$	$6\frac{1}{2}$	$7\frac{1}{2}$
	_____	_____	_____	_____	_____	_____	_____

Compare and order numbers (including decimals to hundredths and mixed numbers)

Around Town

Name _____

Solve each of the problems.

1. A carpenter has 5 boards that she needs to put in order by length. The boards are the following lengths: 5 feet 6 inches, 5 feet 2 inches, 4 feet 8 inches, 5 feet 9 inches, and 6 feet 1 inch. List the boards in order from the longest to the shortest.

_____

2. A city planning board is concerned about the panoramic view of 5 buildings being built. They would like the tallest building in the middle and the shortest buildings on either end of the row. What is a possible arrangement of the buildings if they have the given number of floors?

8 floors, 14 floors, 9 floors, 7 floors, and 5 floors

_____

3. A baker is stacking round cakes to make a tiered cake. He wants the cakes to be in order from the largest cake on the bottom to the smallest cake on the top. The diameters of the cakes are 11 inches, 18 inches, 15 inches, 8 inches, and 21 inches. He needs your help to order the cakes. List the cakes in order from the largest to the smallest.

_____

4. When East Elementary School set up a new Computer Lab, they had six extra cables. The extra cables are 3 yards, 4 feet, 10 feet, 5 yards, 6 feet, and 12 feet long. They want to make a list of the cables in order from longest to shortest. List the cables in order from the longest to shortest.

_____

5. A tile store is having a clearance sale. The manager would like to put the boxes of tiles in a row with the first stack having the greatest number of boxes and the last stack having the fewest number of boxes. Help the manager by listing the stacks in order from greatest to fewest.

27, 89, 105, 62, 96, 108, 32, 29

_____

Compare and order numbers (including decimals to hundredths and mixed numbers)

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Find the numbers listed in order from smallest to largest.

Ⓐ 400, 460, 490, 501, 478, 499
Ⓑ 400, 501, 460, 478, 490, 499
Ⓒ 400, 460, 478, 490, 499, 501
Ⓓ 501, 499, 490, 478, 460, 400

2. Find the numbers listed in order from smallest to largest.

Ⓐ 10.8, 9.9, 9.1, 10.2, 11.2
Ⓑ 9.1, 9.9, 10.2, 10.8, 11.2
Ⓒ 9.1, 9.9, 11.2, 10.2, 10.8
Ⓓ 9.9, 9.1, 10.2, 10.8, 11.2

3. Find the numbers listed in order from smallest to largest.

Ⓐ $\frac{1}{4}, \frac{1}{8}, \frac{1}{2}, \frac{3}{4}, \frac{7}{8}$

Ⓑ $\frac{1}{4}, \frac{1}{8}, \frac{1}{2}, \frac{7}{8}, \frac{3}{4}$

Ⓒ $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}, \frac{7}{8}$

Ⓓ $\frac{1}{8}, \frac{7}{8}, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}$

4. Which number is largest?

Ⓐ 985 Ⓑ 975 Ⓒ 974 Ⓓ 903

5. Which number is less than $\frac{1}{4}$?

Ⓐ $\frac{1}{2}$ Ⓑ $\frac{1}{8}$ Ⓒ $\frac{1}{3}$ Ⓓ $\frac{3}{4}$

6. Find the numbers listed in order from greatest to least.

Ⓐ 1,999, 1,900, 1,899, 1,880, 1,200
Ⓑ 1,900, 1,880, 1,899, 1,200, 1,999
Ⓒ 1,900, 1,899, 1,880, 1,200, 1,999
Ⓓ 1,999, 1,899, 1,880, 1,900, 1,200

7. Find the numbers listed in order from greatest to least.

Ⓐ 12.9, 11.8, 11.2, 11.4, 10.9
Ⓑ 10.9, 11.8, 11.4, 11.2, 12.9
Ⓒ 10.9, 11.2, 11.4, 11.8, 12.9
Ⓓ 12.9, 11.8, 11.4, 11.2, 10.9

8. Find the numbers that are NOT in order from smallest to largest.

Ⓐ 89, 91, 92, 95, 99
Ⓑ 31, 32, 35, 36, 37
Ⓒ 78, 79, 80, 82, 81
Ⓓ 56, 58, 59, 60, 61

9. This table shows the amount sold for 5 different people. List the names in order of their sales, from the greatest to the least amount.

Salesperson	Amount of Sales
Fred	$2,900
Brandon	$2,200
Raul	$2,990
Sharon	$2,889
Maria	$1,500

_____

10. Timothy listed 7 numbers in the following order:

100, 102, 123, 135, 147, 138, 159

Has Timothy correctly listed the numbers in order from smallest to largest? Explain your answer.

_____

Compare and order numbers (including decimals to hundredths and mixed numbers)

Why Is Bowling the Quietest Sport?

Name _____

Round each number to the place value in parentheses. At the bottom of the page, write the corresponding letter on the line above each rounded number to spell out the answer to the riddle.

508,902 (hundred thousands)	_____	**A**	108,498 (thousands)	_____	**N**
685,602 (thousands)	686,000	**B**	685,602 (tens)	_____	**O**
1,800,990 (thousands)	_____	**C**	890 (hundreds)	_____	**P**
3,805 (thousands)	_____	**D**	674,824 (ten thousands)	_____	**R**
2,490,137 (hundred thousands)	_____	**E**	5,935 (tens)	_____	**S**
1,978 (thousands)	_____	**H**	108,905 (tens)	_____	**U**
508,902 (tens)	_____	**I**	2,905 (tens)	_____	**Y**

B							
686,000	2,500,000	1,801,000	500,000	108,910	5,940	2,500,000	
2,910	685,600	108,910		1,801,000	500,000	108,000	
2,000	2,500,000	500,000	670,000		500,000		
900	508,900	108,000		4,000	670,000	685,600	900

Determine place value and round numbers up to millions

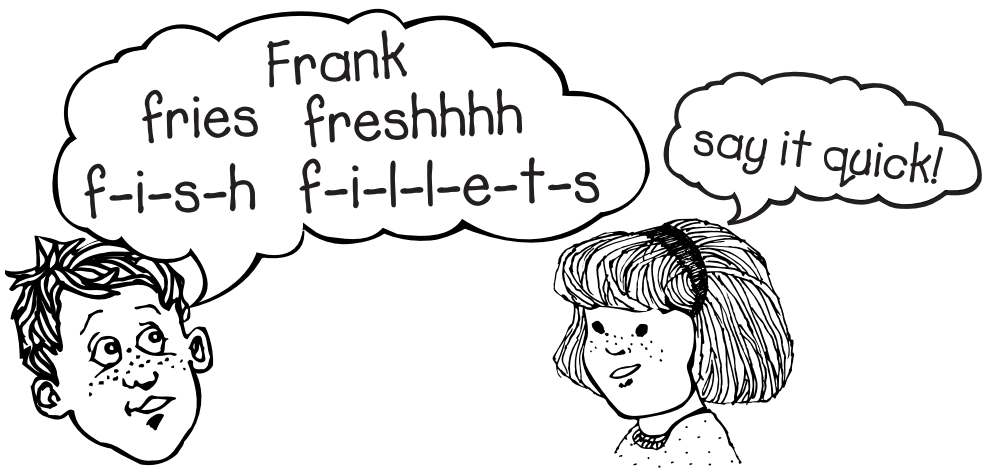
Tongue Twister

Name _____

Find the digit that is in the place value listed. Then write the letter of the corresponding digit in the blank. Read the tongue twister from top to bottom. Try to say it quickly three times.

5,612,973 (ones)	3	G
679,824 (hundreds)	_____	_____
4,870,652 (millions)	_____	_____
2,094,137 (thousands)	_____	_____
148,965 (tens)	_____	_____
7,391 (hundreds)	_____	_____
5,812 (hundreds)	_____	_____
685,702 (thousands)	_____	_____
128,709 (hundreds)	_____	_____
1,864,753 (thousands)	_____	_____
208,915 (hundred thousands)	_____	_____

5	A
4	E
3	G
6	K
7	P
8	R
2	S



Determine place value and round numbers up to millions

Digit Search

Name _____

Look for the digit 7 in each number. Then write the place value on the line.

1. 572,163 _____
2. 726,468 _____
3. 268,317 _____
4. 649,752 _____
5. 7,168,259 _____
6. 708,469 _____
7. 46,971 _____
8. 97,802 _____
9. 7,805,821 _____
10. 6,479,520 _____

Write the digit that is in the place value listed.

11. tens digit in 805,317 _____
12. thousands digit in 916,348 _____
13. hundred thousands digit in 915,647 _____
14. hundreds digit in 1,346,592 _____
15. ones digit in 946,310 _____

Determine place value and round numbers up to millions

Rounding

Name _____

Round each number to the place value listed.

1. 6,480 (hundreds) _____
2. 7,239 (tens) _____
3. 28,731 (thousands) _____
4. 590,472 (ten thousands) _____
5. 289,962 (hundred thousands) _____
6. 190,749 (tens) _____
7. 83,802 (hundreds) _____
8. 730,801 (thousands) _____
9. 69,730 (ten thousands) _____
10. 287,521 (thousands) _____

Round the number 380,721 to the place values listed.

11. tens _____
12. thousands _____
13. ten thousands _____
14. hundred thousands _____
15. hundreds _____

Determine place value and round numbers up to millions

Solve It!

Name _____

Solve each problem.

1. Helena was shopping with her mom and saw five things that she wanted to buy. The prices were $24, $19.98, $17.50, $9.45, and $29.90. Helena rounded each price to the nearest ten dollars and added them up to estimate the total cost. What is the estimate for the cost of the 5 items?

_____

2. Drew was asked to round the number 25,803 to the nearest ten. He said it was 25,810, but Jane said that it is 25,800. Write a note to Drew explaining who was correct, and tell why.

_____

_____

3. Roberto was asked to round these numbers to the nearest hundred. Here is his work:

   297,059 became 297,000
   280,460 became 280,400
   109,973 became 109,900

   Do you see a pattern of errors in Roberto's work? What should Roberto do differently next time?

_____

_____

4. Angela was asked to identify what digit is in the tens place in the number 12,843. She said it was the 4. Was she correct? If she was, write "correct" on your paper. If not, identify what digit it should have been.

_____

Determine place value and round numbers up to millions

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, find the place value for the digit 5.

1. 580,392

Ⓐ hundred thousands
Ⓑ hundreds
Ⓒ ones
Ⓓ ten thousands

2. 490,651

Ⓐ ten thousands
Ⓑ hundreds
Ⓒ tens
Ⓓ hundred thousands

3. 835,791

Ⓐ ten thousands
Ⓑ hundreds
Ⓒ thousands
Ⓓ ones

4. 28,735

Ⓐ thousands
Ⓑ hundreds
Ⓒ tens
Ⓓ ones

5. Round 380,824 to the nearest ten.

Ⓐ 380,000
Ⓑ 380,820
Ⓒ 381,000
Ⓓ 380,800

6. Round 287,427 to the nearest ten thousand.

Ⓐ 300,000
Ⓑ 288,000
Ⓒ 297,000
Ⓓ 290,000

7. Round 1,804,579 to the nearest hundred.

Ⓐ 1,800,000
Ⓑ 1,804,500
Ⓒ 1,805,000
Ⓓ 1,804,600

8. Round 49,246 to the nearest hundred.

Ⓐ 49,200
Ⓑ 49,240
Ⓒ 49,300
Ⓓ 49,250

9. Juan was asked to round a number to the nearest hundreds place value. Juan rounded the number 359,073 to 359,100. Was Juan correct? If he was, write "correct." If Juan made a mistake, write a note to him explaining his mistake.

_____

_____

_____

10. Shirley was asked to round a number to the nearest ten thousands place value. Shirley rounded the number 1,874,026 to 1,880,000. Was Shirley correct? If she was, write "correct." If Shirley made a mistake, write a note to her explaining the mistake.

_____

_____

_____

Determine place value and round numbers up to millions

Why Can't Bicycles Stand by Themselves?

Name _____

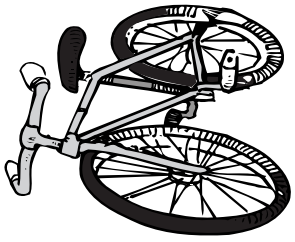
To solve the riddle, find the sum for each addition problem. Then write the corresponding letter on the line above each sum.

T	407 + 209 =	616	T	503 + 303 =	_____
E	519 + 45 =	_____	T	802 + 407 + 842 =	_____
E	913 + 289 =	_____	E	735 + 285 + 482 =	_____
R	45 + 132 + 84 =	_____	A	375 + 493 + 263 =	_____
I	256 + 250 + 831 =	_____	R	907 + 32 + 284 =	_____
O	290 + 491 + 502 =	_____	W	280 + 481 + 427 =	_____
Y	805 + 204 + 74 =	_____	H	285 + 429 + 492 =	_____
D	89 + 307 + 804 =	_____			

BECAUSE...

____	____	____	____		____	____	____		T	____	____
806	1,206	1,202	1,083		1,131	261	1,502		616	1,188	1,283

____	____	____	____	____
2,051	1,337	1,223	564	1,200



Demonstrate addition with up to 5 three-digit numbers, utilizing regrouping

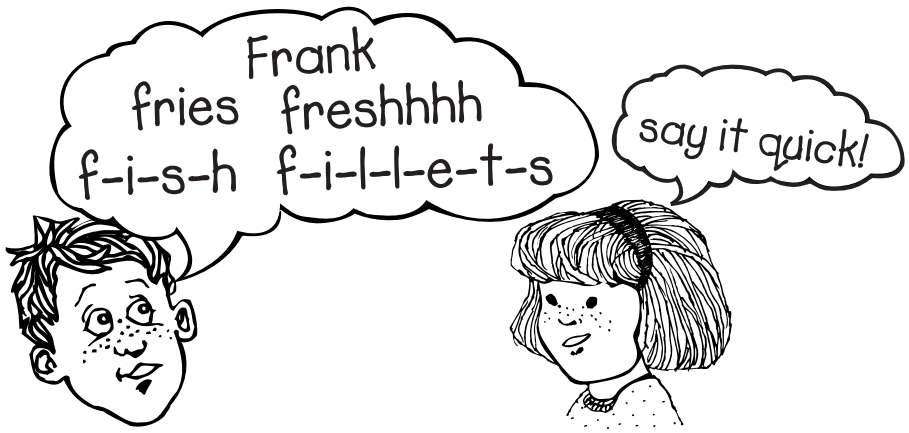
Tongue Twister

Name _____

Solve each addition problem. Then write the letter on each line above the sum. Read the tongue twister and try to say it quickly three times.

A	379 + 295 + 49 =	_____
E	297 + 45 + 320 =	_____
I	234 + 492 + 472 =	_____
L	742 + 284 + 423 =	_____
M	454 + 485 + 62 =	_____
N	402 + 52 + 831 =	_____
O	10 + 20 + 420 =	450
U	38 + 47 + 620 =	_____

_____	_____	_____	_____	_____	_____	_____	_____
723	1,449	705	1,001	1,198	1,285	705	1,001
_____	_____	_____	O	_____	_____	_____	_____
1,449	1,198	1,285	450	1,449	662	705	1,001



Demonstrate addition with up to 5 three-digit numbers, utilizing regrouping

Sum Fun

Name _____

Find the sum for each of the following.

1. 398 + 590 + 490 = _____	**2.** 290 + 852 + 29 = _____
3. 180 + 9 + 297 = _____	**4.** 73 + 821 + 820 = _____

5.
```
  173
  925
+ 946
```

6.
```
  107
  804
  703
+ 983
```

7.
```
  762
  496
  506
+ 492
```

8.
```
  602
  721
  613
+  95
```

9.
```
  106
  832
  826
+ 381
```

10.
```
  208
  462
  766
  392
+ 793
```

Demonstrate addition with up to 5 three-digit numbers, utilizing regrouping

Add Them Up

Name _____

Find the sum for each of the following.

1. 208 + 520 + 286 + 826 = _____	**2.** 601 + 843 + 826 + 825 = _____
3. 926 + 482 + 82 = _____	**4.** 865 + 22 + 862 + 93 = _____

5.
826
835
731
+ 651

6.
561
526
349
+ 496

7.
592
103
501
+ 600

8.
506
59
496
+ 34

9.
496
182
496
+ 768

10.
792
852
816
195
+ 463

Demonstrate addition with up to 5 three-digit numbers, utilizing regrouping

Let's Go Shopping

Name _____

Solve each problem.

1. Sally would like to buy 2 cases of candy bars, and each one costs $24. She would also like to buy one twelve-pack of soda for $3. What will be the total of the purchases?

_____

2. Jorge wants to buy a new bike for himself and his sister. His bike costs $216, and his sister's bike costs $190. What will be the total for the two bikes?

_____

3. Helena wants to buy three CD sets for the following prices: $59, $129, and $64. What will be the total of the three CD sets?

_____

4. Brandon and Ian both want to buy new stereos. Each stereo costs $229. In addition, each boy wants to buy a set of speakers for $119. The tax for the 2 stereos and the 2 sets of speakers is $56. What will be the total for these items including tax?

_____

5. Amy and April were shopping and wanted to buy new coats for the winter. Amy found one that cost $56 and April found one that cost $98. What was the total for both coats?

_____

Demonstrate addition with up to 5 three-digit numbers, utilizing regrouping

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 450 + 320 = _____

Ⓐ 700 Ⓒ 670
Ⓑ 950 Ⓓ 770

2. 83 + 291 + 582 = _____

Ⓐ 956 Ⓒ 756
Ⓑ 856 Ⓓ 7,255

3.
908
625
349
+ 584

Ⓐ 2,475 Ⓒ 2,376
Ⓑ 2,466 Ⓓ 2,476

4.
231
612
303
+ 261

Ⓐ 1,400 Ⓒ 2,376
Ⓑ 1,407 Ⓓ 211,107

5. 465 + 549 + 152 + 101 = _____

Ⓐ 1,267 Ⓒ 1,257
Ⓑ 1,260 Ⓓ 1,167

6. 462 + 591 + 201 + 207 = _____

Ⓐ 1,451 Ⓒ 1,361
Ⓑ 1,351 Ⓓ 1,461

7.
564
862
269
+ 142

Ⓐ 1,847 Ⓒ 1,837
Ⓑ 1,835 Ⓓ none of the above

8.
264
492
297
464
+ 348

Ⓐ 1,860 Ⓒ 1,864
Ⓑ 1,866 Ⓓ none of the above

9. Write a story problem that would utilize the following number expression in its solution:

528 + 419 + 290 + 410

_____

_____

_____

_____

10. Aja's parents are buying 4 new bicycles priced at $259, $199, $159, and $129. What is the total of the 4 bikes?

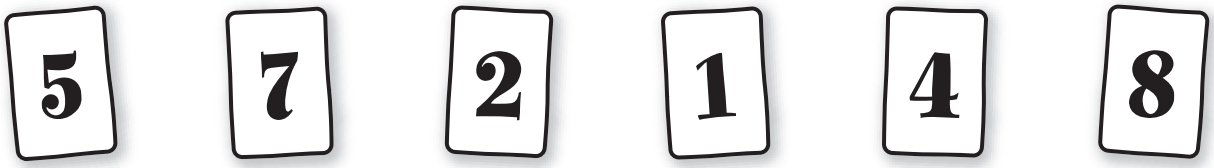
_____

Demonstrate addition with up to 5 three-digit numbers, utilizing regrouping

Number Games

Name _____

Sally and Juan are playing a game. They have drawn these six number cards:



1. What is the smallest difference they can make if they make two 3-digit numbers and subtract the smaller one from the larger one?

_____

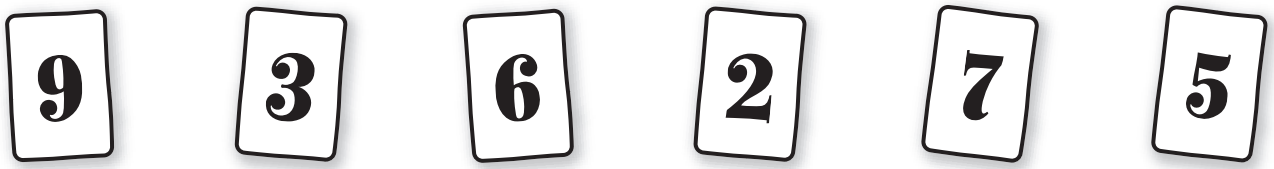
2. What is the largest difference they can make if they make two 3-digit numbers and subtract the smaller one from the larger one?

_____

3. Why do you think that this is the largest difference?

_____

Angel and Jeremiah are playing the same game and have drawn the following six cards:



4. What is the smallest difference they can make if they make two 3-digit numbers and subtract the smaller one from the larger one?

_____

5. Why do you think that this is the smallest difference you can make?

_____

6. What is the largest difference they can make if they make two 3-digit numbers and subtract the smaller one from the larger one?

_____

Demonstrate subtraction with three-digit numbers, utilizing regrouping

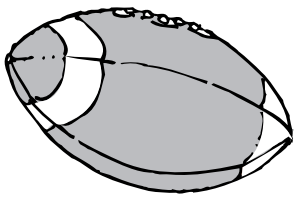
Football

Name _____

To solve the riddle, solve each subtraction problem. Then write the corresponding letter on the line above the difference. The letters will spell out the answer for you.

T	747 – 235 = 512	A	510 – 265 = _____
M	529 – 417 = _____	O	490 – 489 = _____
I	413 – 250 = _____	E	378 – 236 = _____
H	841 – 690 = _____	T	263 – 170 = _____
E	379 – 163 = _____	U	492 – 396 = _____
T	290 – 199 = _____	E	734 – 718 = _____
P	804 – 321 = _____	G	205 – 163 = _____

Why did the football coach send in his second string?



			T						
91	1		512	163	216		96	483	
93	151	142		42	245	112	16		

Demonstrate subtraction with three-digit numbers, utilizing regrouping

What's the Difference?

Name _____

Find the following differences.

1. 109 – 80 = _____

2. 694 – 452 = _____

3. 359 – 126 = _____

4. 298 – 176 = _____

5. 590 – 107 = _____

6. 640 – 150 = _____

7. 480 – 290 = _____

8. 737 – 269 = _____

9. 531 – 284 = _____

10. 630 – 531 = _____

11. 805 – 102	**12.** 750 – 230	**13.** 620 – 420	**14.** 279 – 180	**15.** 530 – 267
16. 497 – 359	**17.** 549 – 524	**18.** 725 – 225	**19.** 737 – 638	**20.** 462 – 421

Demonstrate subtraction with three-digit numbers, utilizing regrouping

Subtraction Practice

Name _____

Find the following differences.

1. 562 − 162	**2.** 795 − 705	**3.** 402 − 120	**4.** 603 − 546	**5.** 413 − 267
6. 465 − 361	**7.** 156 − 149	**8.** 343 − 342	**9.** 496 − 396	**10.** 726 − 627

11. 456 − 261 = _____

12. 894 − 621 = _____

13. 496 − 261 = _____

14. 895 − 725 = _____

15. 627 − 130 = _____

16. 820 − 419 = _____

17. 597 − 496 = _____

18. 900 − 199 = _____

19. 560 − 250 = _____

20. 764 − 179 = _____

Demonstrate subtraction with three-digit numbers, utilizing regrouping

Solve It!

Name _____

Solve each problem.

1. Sarah had $679 in her savings account. She took $235 out of the account to buy a new stereo. What was the balance after her withdrawal of $235?

_____

2. The Wildcat Elementary School is going on a field trip to the zoo. They have reserved 8 buses that have a total of 528 seats. There are 470 students in the school and 35 teachers that will be going to the zoo. Are there enough seats for all the students and teachers to ride on the buses?

_____

3. The fourth-graders at Shawsheen Elementary School were doing their annual fundraiser. They sold $998 worth of candy. The bill they have to pay is $425. How much profit will the fourth-grade class make?

_____

4. Jeremy has $275 saved up. He wants to buy a CD player for $119 and a TV for $179. Does he have enough for both? Why or why not?

_____

5. Peter's family was driving to visit his grandparents' house. The entire trip was 642 miles. By lunchtime, they had driven 375 miles. Were they at least halfway there? How many miles were left to go?

_____

Demonstrate subtraction with three-digit numbers, utilizing regrouping

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 305
– 206

Ⓐ 100
Ⓑ 99
Ⓒ 301
Ⓓ 101

2. 472
– 190

Ⓐ 282
Ⓑ 322
Ⓒ 662
Ⓓ 382

3. 649
– 351

Ⓐ 398
Ⓑ 298
Ⓒ 351
Ⓓ 318

4. 842
– 359

Ⓐ 517
Ⓑ 513
Ⓒ 483
Ⓓ none of the above

5. 349 – 162 = _____

Ⓐ 207
Ⓑ 180
Ⓒ 227
Ⓓ 187

6. 912 – 613 = _____

Ⓐ 301
Ⓑ 201
Ⓒ 299
Ⓓ 399

7. Sharon had $815 and spent $621. How much does she have left?

Ⓐ $194
Ⓑ $214
Ⓒ $294
Ⓓ $134

8. Brendan picked 254 flowers. He gave away 107 flowers. How many does he have left?

Ⓐ 153
Ⓑ 147
Ⓒ 143
Ⓓ 361

9. Roberto started with 295 tickets and gave away 146 of them. Does he have enough left over to give all the 98 fourth-graders tickets? Why or why not?

_____

_____

_____

_____

10. Julia was planning a trip with her Mom. She wants to save $145 to pay her entrance fees for the amusement parks. She has $98 saved. How much more does she need to save? Show how you found your answer.

_____

Demonstrate subtraction with three-digit numbers, utilizing regrouping

Why Aren't Dragons Hungry on Weekends?

Name _____

To solve the riddle, solve each multiplication problem. Then write the letter on the line above each product. The letters will spell out the answer for you.

E	7 × 8 = 56	**H**	6 × 3 = _____
T	3 × 2 = _____	**N**	7 × 10 = _____
E	9 × 6 = _____	**K**	8 × 9 = _____
T	1 × 8 = _____	**O**	7 × 9 = _____
E	2 × 6 = _____	**H**	8 × 4 = _____
G	9 × 3 = _____	**S**	6 × 6 = _____
Y	8 × 8 = _____	**A**	7 × 6 = _____
K	5 × 9 = _____	**I**	8 × 6 = _____
N	8 × 3 = _____	**T**	10 × 5 = _____
Y	2 × 10 = _____	**L**	9 × 9 = _____
W	7 × 7 = _____	**A**	2 × 1 = _____

		E							
8	32	56	20		63	24	81	64	
12	42	6		49	54	2	45		
72	70	48	27	18	50	36			

Demonstrate multiplication facts through 10 x 10

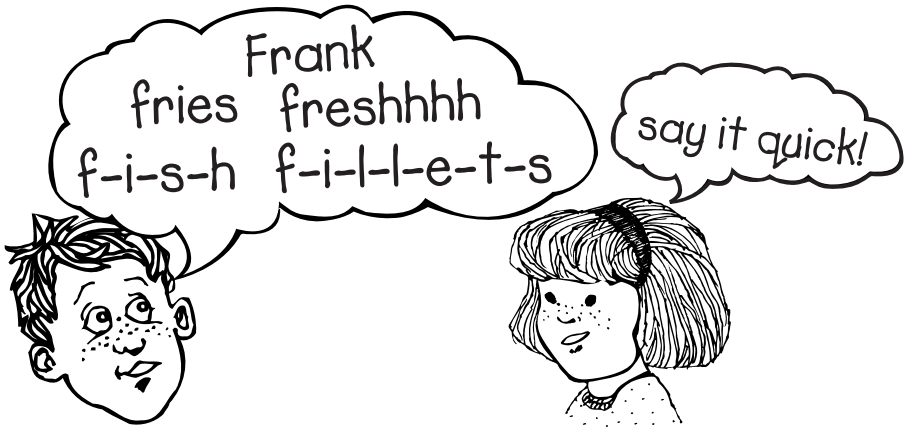
Tongue Twister

Name _____

Solve each multiplication problem. Then write the letter on each line above the product. Read the tongue twister and try to say it quickly three times.

A	8 × 7 = 56	**R**	3 × 6 = _____
E	6 × 7 = _____	**S**	9 × 6 = _____
G	7 × 7 = _____	**T**	7 × 9 = _____
I	5 × 6 = _____	**U**	2 × 5 = _____
N	9 × 4 = _____	**Y**	9 × 9 = _____
O	8 × 3 = _____		

63	30	36	81					
		A					A	
24	18	56	36	49	10	63	56	36
63	24	36	49	10	42	54		

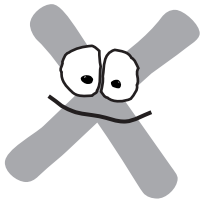


Demonstrate multiplication facts through 10 x 10

Multiplication Table

Name _____

Complete the following multiplication table, but be aware that the numbers are **not** in the usual order. (The first box, 6 x 7, has been done for you.)



×	6	1	4	9	2	7	3	10	5	8
7	42									
2										
9										
4										
5										
1										
3										
8										
10										
6										

Demonstrate multiplication facts through 10 x 10

Fast Facts

Name _____

Complete the following multiplication problems as quickly as you can.

1.	5 × 6 = _____	2 × 8 = _____	1 × 7 = _____
2.	2 × 7 = _____	8 × 9 = _____	8 × 7 = _____
3.	4 × 8 = _____	7 × 6 = _____	9 × 2 = _____
4.	9 × 6 = _____	3 × 3 = _____	7 × 4 = _____
5.	1 × 6 = _____	10 × 7 = _____	9 × 5 = _____
6.	10 × 5 = _____	8 × 8 = _____	5 × 1 = _____
7.	2 × 9 = _____	9 × 4 = _____	5 × 8 = _____
8.	9 × 9 = _____	4 × 4 = _____	10 × 9 = _____
9.	4 × 1 = _____	8 × 3 = _____	3 × 7 = _____
10.	7 × 7 = _____	2 × 2 = _____	6 × 8 = _____
11.	4 × 10 = _____	6 × 10 = _____	10 × 10 = _____
12.	2 × 1 = _____	5 × 7 = _____	9 × 3 = _____
13.	1 × 8 = _____	7 × 9 = _____	
14.	6 × 6 = _____	8 × 2 = _____	

How long did it take you to complete all the problems? _____

How many did you get correct? _____

Demonstrate multiplication facts through 10 x 10

Around the Classroom

Name _____

Solve each problem.

1. There are three boys in Mrs. Johnson's fourth-grade classroom. Each boy brought 9 baseball cards to school with him. How many baseball cards were there in all?

_____

2. Shirley brought 8 jars, each filled with 5 stuffed frogs. How many frogs did she have in all?

_____

3. Jason wanted to bring cupcakes for his entire class. He brought 6 packages with 3 cupcakes in each package. If there are 21 students in his class, did he have enough cupcakes? Tell why or why not.

_____

4. Brett was collecting quarters. He wanted to exchange a five-dollar bill for quarters. How many quarters will he get?

_____

5. Regina bought packages of markers to share with her after-school club. She bought 7 boxes of the 8 packs of markers. There are 25 girls in her club. Did she have enough markers for each girl to have one?

_____

6. Maria was climbing up a large flight of stairs, taking 3 steps at a time. If she made 7 strides with her feet, how many steps were there in the flight of stairs?

_____

Demonstrate multiplication facts through 10 x 10

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 7 × 8 = _____

Ⓐ 42 Ⓒ 48
Ⓑ 56 Ⓓ none of the above

2. 9 × 6 = _____

Ⓐ 54 Ⓒ 48
Ⓑ 56 Ⓓ none of the above

3. 3 × 8 = _____

Ⓐ 12 Ⓒ 24
Ⓑ 18 Ⓓ none of the above

4. 4 × 7 = _____

Ⓐ 21 Ⓒ 27
Ⓑ 24 Ⓓ none of the above

5. Which of the following does NOT have a product of 24?

Ⓐ 8 × 3 Ⓒ 9 × 3
Ⓑ 6 × 4 Ⓓ 3 × 8

6. Which of the following does NOT have a product of 12?

Ⓐ 4 × 3 Ⓒ 6 × 2
Ⓑ 5 × 2 Ⓓ 3 × 4

7. Chad was buying 4 six-packs of soda. How many sodas did he buy in all?

Ⓐ 4 Ⓒ 12
Ⓑ 6 Ⓓ 24

8. Suzy has 9 bags of erasers. Each bag has 6 erasers. Does she have enough to give one eraser to each student in her class if there are 27 students in her class?

Ⓐ Yes, because she has 30 erasers.
Ⓑ No, because she only has 6 erasers.
Ⓒ Yes, because she has 54 erasers.
Ⓓ No, because she only has 18 erasers.

9. Jake was buying muffins for his birthday treats for his class. There are 32 students in his class. If he buys 9 six-packs of muffins, will he have enough? Tell why or why not.

_____

_____

_____

_____

10. Michelle has 6 packs of gum. If each pack has 5 pieces, how many pieces does she have?

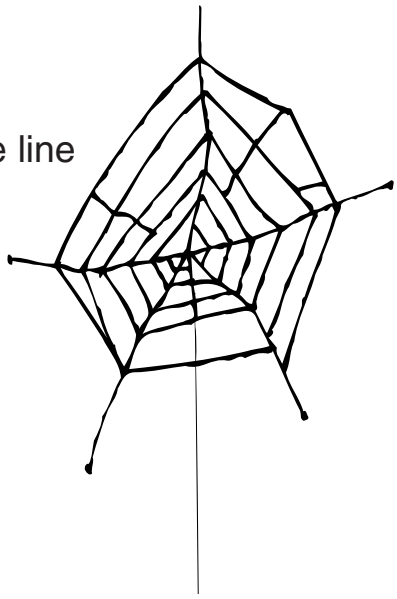
_____

Skill practice copy here

Demonstrate multiplication facts through 10 x 10

Why Did the Spider Get a New Computer?

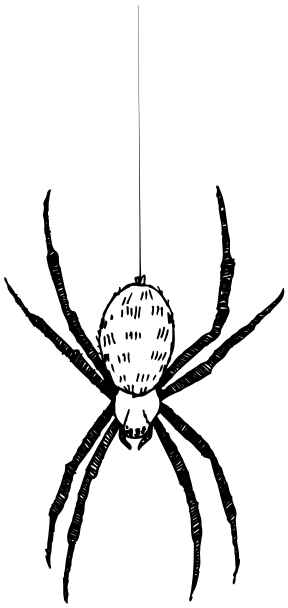
Name _____



Solve each multiplication problem. Then write each letter on the line above the product. The letters will spell out the answer for you.

T	8 × 7 =	56
D	11 × 4 =	
D	9 × 7 =	
I	5 × 2 =	
E	8 × 8 =	
E	11 × 9 =	
A	12 × 3 =	
E	4 × 10 =	
S	3 × 4 =	
E	10 × 11 =	
B	9 × 3 =	
W	12 × 6 =	
E	7 × 12 =	
H	3 × 6 =	
N	9 × 6 =	
E	11 × 11 =	

18	84				
54	110	99	44	121	63
36		72	64	27	
		T			
12	10	56	40		



Demonstrate multiplication facts through 12 x 12

Tongue Twister

Name _____

Solve each multiplication problem. Then write the letter on each line above the product. Read the tongue twister and try to say it quickly three times.

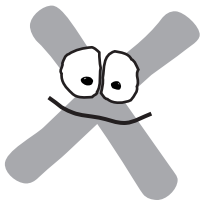
C	12 × 4 =	48
E	9 × 7 =	
H	11 × 11 =	
I	5 × 11 =	
K	8 × 7 =	
L	11 × 12 =	
S	9 × 11 =	
T	12 × 12 =	
X	10 × 11 =	

							C	
99	55	110		144	121	55	48	56
		144	121	55	99	144	132	63
						C		
			99	144	55	48	56	99

Demonstrate multiplication facts through 12 x 12

A Different Multiplication Table

Name _____



Complete the multiplication table, but be aware that the numbers are **not** in the usual order. (The first box, 1 x 2, has been done for you.)

×	2	12	10	6	8	5	7	1	11	4	9	3
1	2											
6												
12												
4												
7												
10												
3												
8												
11												
9												
5												
2												

Demonstrate multiplication facts through 12 x 12

Quick as a Wink

Name _____

Complete the multiplication problems as quickly as you can.

1.	5 × 12 = _____	2 × 8 = _____	11 × 7 = _____
2.	2 × 7 = _____	8 × 9 = _____	8 × 7 = _____
3.	4 × 8 = _____	7 × 6 = _____	11 × 2 = _____
4.	9 × 6 = _____	3 × 3 = _____	7 × 4 = _____
5.	1 × 11 = _____	10 × 7 = _____	9 × 5 = _____
6.	10 × 5 = _____	8 × 8 = _____	5 × 1 = _____
7.	12 × 9 = _____	9 × 12 = _____	5 × 8 = _____
8.	9 × 9 = _____	4 × 4 = _____	10 × 9 = _____
9.	4 × 11 = _____	8 × 3 = _____	3 × 7 = _____
10.	7 × 7 = _____	2 × 12 = _____	6 × 8 = _____
11.	4 × 0 = _____	6 × 10 = _____	10 × 10 = _____
12.	12 × 1 = _____	5 × 7 = _____	12 × 12 = _____
13.	11 × 8 = _____	7 × 9 = _____	
14.	6 × 6 = _____	8 × 2 = _____	

How long did it take you to complete all the problems? _____

How many did you get correct? _____

Demonstrate multiplication facts through 12 x 12

Using Multiplication

Name _____

Solve each problem.

1. George was collecting eggs. He filled 6 cartons that each held one dozen. How many eggs did George collect?

_____

2. Shawna collected stamps. She found that she could put 10 35-cent stamps on each page. If she had 6 full pages, how many stamps did she have?

_____

3. Sharise is packing 6 lunches for her family to go on a picnic. She knows that each person wants 2 sandwiches with 2 slices of bread for each sandwich. How many slices of bread does she need?

_____

4. Leanne was buying six-packs of flowers to plant with her mother. She bought 11 six-packs. Does she have enough flowers if she wants to plant a row with 70 plants in it?

_____

5. Josh is riding his bike when he notices that there are 12 spokes that attach to the right side of his tire and 12 spokes that attach to the left side of the tire. If the front and back tires are the same, how many spokes are on his two tires? Can you solve the problem two different ways?

_____

_____

Demonstrate multiplication facts through 12 x 12

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 11 × 12 = _____

Ⓐ 144 Ⓒ 121
Ⓑ 132 Ⓓ none of the above

2. 9 × 8 = _____

Ⓐ 72 Ⓒ 81
Ⓑ 84 Ⓓ none of the above

3. 10 × 12 = _____

Ⓐ 121 Ⓒ 100
Ⓑ 144 Ⓓ none of the above

4. 7 × 5 = _____

Ⓐ 42 Ⓒ 56
Ⓑ 35 Ⓓ none of the above

5. Which of the following does NOT have a product of 24?

Ⓐ 6 × 4 Ⓒ 10 × 2
Ⓑ 2 × 12 Ⓓ 3 × 8

6. Which of the following does NOT have a product of 36?

Ⓐ 12 × 3 Ⓒ 6 × 6
Ⓑ 9 × 4 Ⓓ 5 × 7

7. Annie bought 7 six-packs of soda to share with her class of 22 students. Are there enough sodas for each student to receive two?

Ⓐ Yes, there are 42 sodas and she needs 22.
Ⓑ Yes, there are 48 sodas and she needs 44.
Ⓒ Yes, there are 48 sodas and she needs 22.
Ⓓ No, there are 42 sodas and she needs 44.

8. Colton is collecting empty milk cartons to make a castle. He needs 12 cartons for each wall and wants to build a castle with 8 walls. How many cartons does he need?

Ⓐ 20 Ⓒ 12
Ⓑ 96 Ⓓ 84

9. Alec is sharing gum with his class of 25 students. He has 6 packs with 5 pieces in each pack. Does he have enough gum? Why or why not?

_____

_____

_____

_____

10. Amanda is bringing bags of cookies to her Girl Scout meeting. She is bringing 4 bags with a dozen cookies in each bag. How many cookies is she bringing?

_____

Demonstrate multiplication facts through 12 x 12

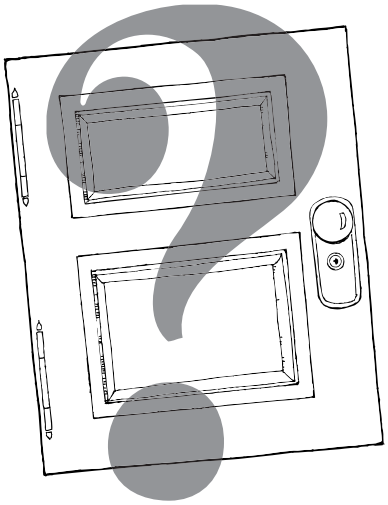
When Is a Door Not a Door?

Name _____

Solve each multiplication problem. Then write the letter on the line for each product. The letters will spell out the answer for you.

A	12 × 27 = 324	**J**	49 × 89 = _____
A	63 × 54 = _____	**N**	615 × 42 = _____
E	120 × 56 = _____	**R**	713 × 39 = _____
H	430 × 12 = _____	**S**	46 × 297 = _____
I	951 × 13 = _____	**T**	55 × 714 = _____
I	342 × 25 = _____	**W**	342 × 22 = _____

_____	_____	_____	_____	
7,524	5,160	6,720	25,830	
_____	_____		_____	_____
8,550	39,270		12,363	13,662
_____	_____	A	_____	
3,402	4,361	324	27,807	

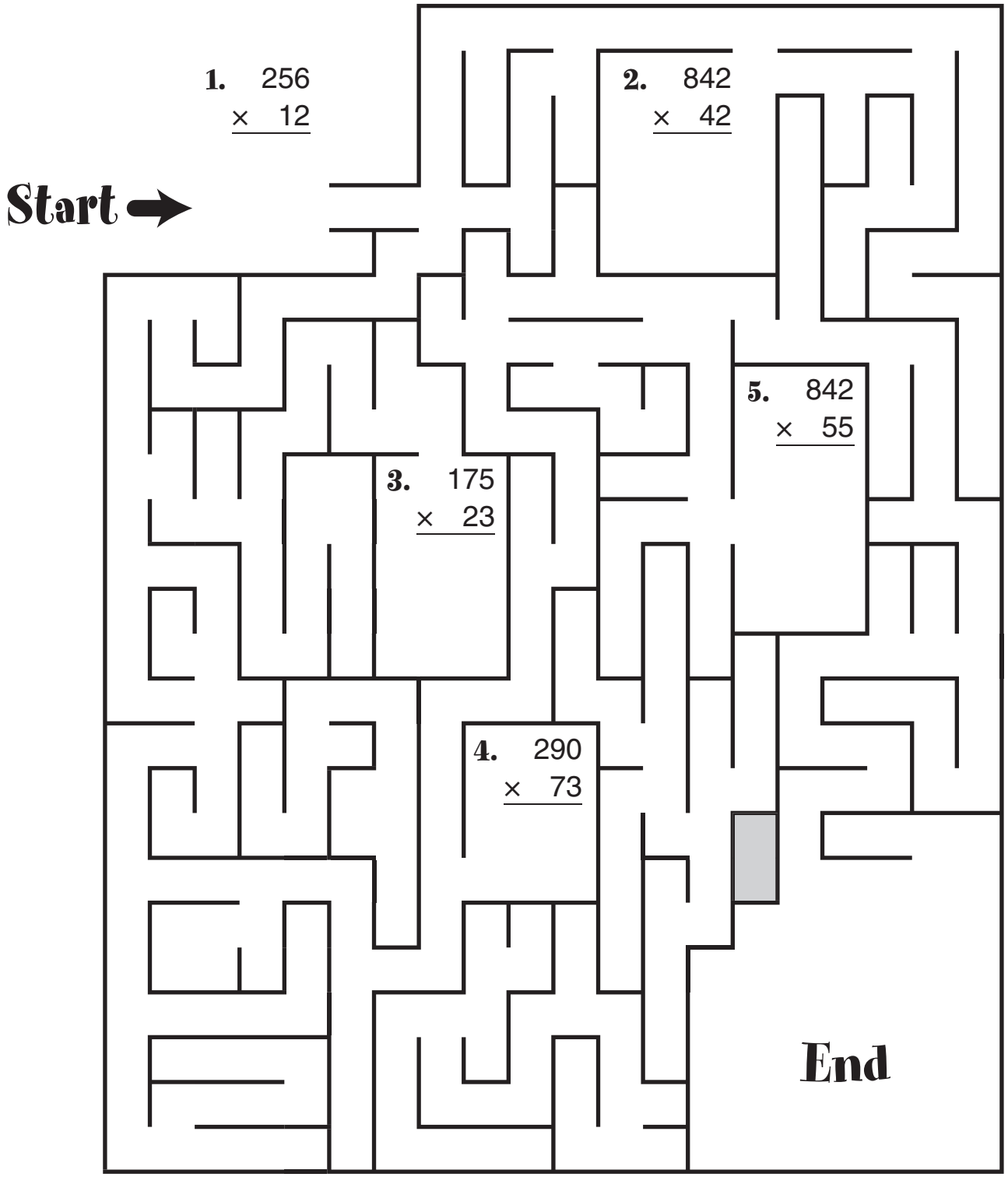


Demonstrate multiplication with various numbers up to a three-digit number multiplied by a two-digit number

Maze

Name _____

Solve each problem in order as you find the way through the maze.
Color the path through the maze.



Demonstrate multiplication with various numbers up to a three-digit number multiplied by a two-digit number

Write the Product

Name _____

Solve the following problems.

1. 25 × 75 = _____

2. 84 × 52 = _____

3. 62 × 38 = _____

4. 128 × 73 = _____

5. 593 × 26 = _____

6. 372 × 73 = _____

7. 274 × 84 = _____

8. 751 × 80 = _____

9. 59 × 991 = _____

10. 734 × 14 = _____

11. 84 × 90

12. 25 × 11

13. 64 × 21

14. 134 × 16

15. 295 × 40

16. 249 × 34

17. 167 × 59

18. 82 × 136

19. 148 × 27

20. 63 × 120

Demonstrate multiplication with various numbers up to a three-digit number multiplied by a two-digit number

Multiplication Challenge

Name _____

Solve the following problems.

1. 63 × 51 = _____

2. 43 × 82 = _____

3. 12 × 43 = _____

4. 240 × 67 = _____

5. 382 × 18 = _____

6. 726 × 45 = _____

7. 453 × 34 = _____

8. 123 × 44 = _____

9. 22 × 715 = _____

10. 423 × 50 = _____

11.
$$\begin{array}{r} 47 \\ \times\ 28 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 67 \\ \times\ 66 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 56 \\ \times\ 53 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 285 \\ \times\ 64 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 549 \\ \times\ 52 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 632 \\ \times\ 84 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 194 \\ \times\ 42 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 84 \\ \times\ 267 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 492 \\ \times\ 46 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 18 \\ \times\ 105 \\ \hline \end{array}$$

Demonstrate multiplication with various numbers up to a three-digit number multiplied by a two-digit number

At School

Name _____

Solve each problem.

1. Hudson Elementary School is planning their fundraiser. To meet their goal, they have asked every student to raise $25. If there are 492 students in the school, how much money do they want to earn to make their goal?

_____

2. Shirley has 26 students in her class at school. Each one is bringing in 250 sheets of paper. How many sheets of paper in all will there be in her class? Can you solve the problem in at least two different ways?

_____

_____

3. Kevin has 49 books on his shelf. There are an average of 129 pages in each book. About how many pages are on the bookshelf?

_____

4. In the problem above, if a worm starts at one end of the bookshelf and eats through all the pages to the other end, how many pages will the worm eat through, including the front and back covers of each book?

_____

5. Ian and Rebecca are stacking newspapers in the corner of their classroom. They need 145 newspapers to reach the height of their window. There are 42 pages in each newspaper, and when stacked, they fold them in half. How many sheets of paper does it take to reach the window's height?

_____

Demonstrate multiplication with various numbers up to a three-digit number multiplied by a two-digit number

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 11 × 29 is about _____

Ⓐ 200 Ⓒ 150
Ⓑ 300 Ⓓ 400

2. 49 × 26 = _____

Ⓐ 294 Ⓒ 1,274
Ⓑ 392 Ⓓ 338

3. 164 × 29 = _____

Ⓐ 4,756 Ⓒ 328
Ⓑ 1,476 Ⓓ 1,804

4. 198 × 11 = _____

Ⓐ 198 Ⓒ 2,078
Ⓑ 396 Ⓓ 2,178

5. Which problem does NOT have a product of 1,680?

Ⓐ 42 × 40
Ⓑ 24 × 70
Ⓒ 42 × 48
Ⓓ 48 × 35

6. Which problem does NOT have a product of 2,450?

Ⓐ 24 × 50
Ⓑ 245 × 10
Ⓒ 49 × 50
Ⓓ 70 × 35

7. Charles is buying 14 boxes of sports cards. If each box contains 125 cards, how many cards is he purchasing?

Ⓐ 1,750 Ⓒ 625
Ⓑ 500 Ⓓ none of the above

8. Samantha has 84 CDs on her shelf. The average length of her CDs is 72 minutes. If she listened to all the CDs nonstop, how many minutes would it take her?

Ⓐ 7,258 Ⓒ 756
Ⓑ 864 Ⓓ 6,048

9. There are 25 classrooms in Heath Elementary School. Each classroom has one phone and the office has 5 phones. There are 12 buttons on each phone. How many buttons are there in all?

_____

10. Centennial Elementary School wants to raise $19,000 for some new playground equipment. There are 579 students in the school. If each student raises $30, will they have enough money? Justify your answer.

_____

_____

_____

_____

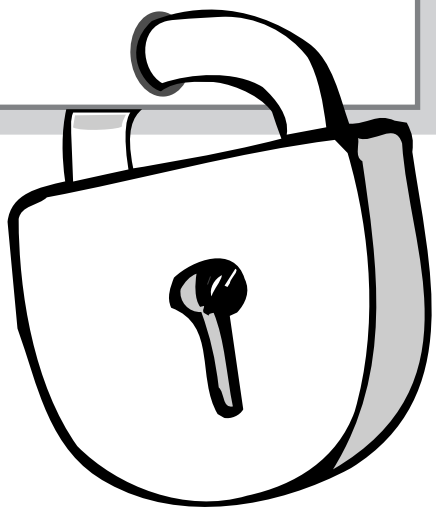
Demonstrate multiplication with various numbers up to a three-digit number multiplied by a two-digit number

What Kind of Key Won't Work in a Lock?

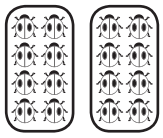
Name _____

Write the letter for each division problem on the line above the model.
The letters will spell out the answer for you.

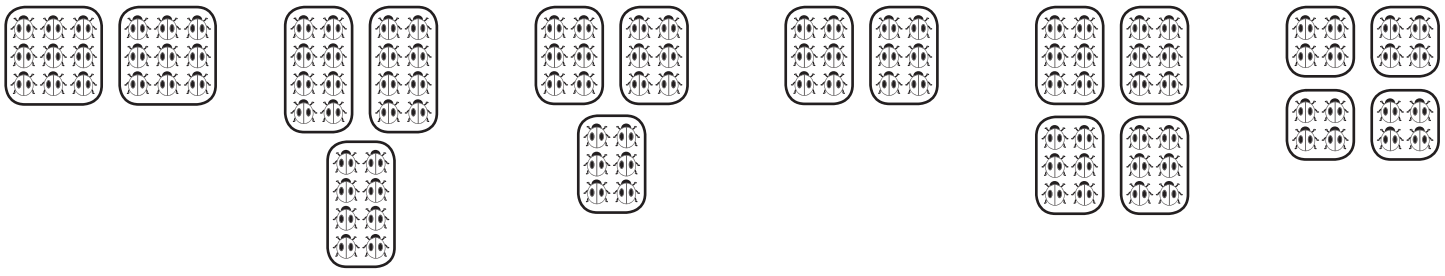
A	16 ÷ 2 = 8	**N**	18 ÷ 3 = _____
E	24 ÷ 4 = _____	**O**	24 ÷ 3 = _____
K	12 ÷ 2 = _____	**Y**	16 ÷ 4 = _____
M	18 ÷ 2 = _____		



A



_____ _____ _____ _____ _____ _____



Demonstrate division in conceptual form (single-digit divisors)

What Is It?

Name _____

Write two division facts for each model. Then color the spaces in the picture.

Yellow

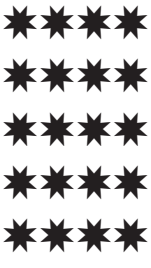
24 ÷ 2 = 6

24 ÷ 12 = 2

Blue

_____

_____



Blue

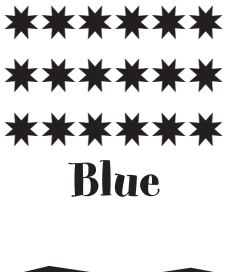
_____

_____

Yellow

_____

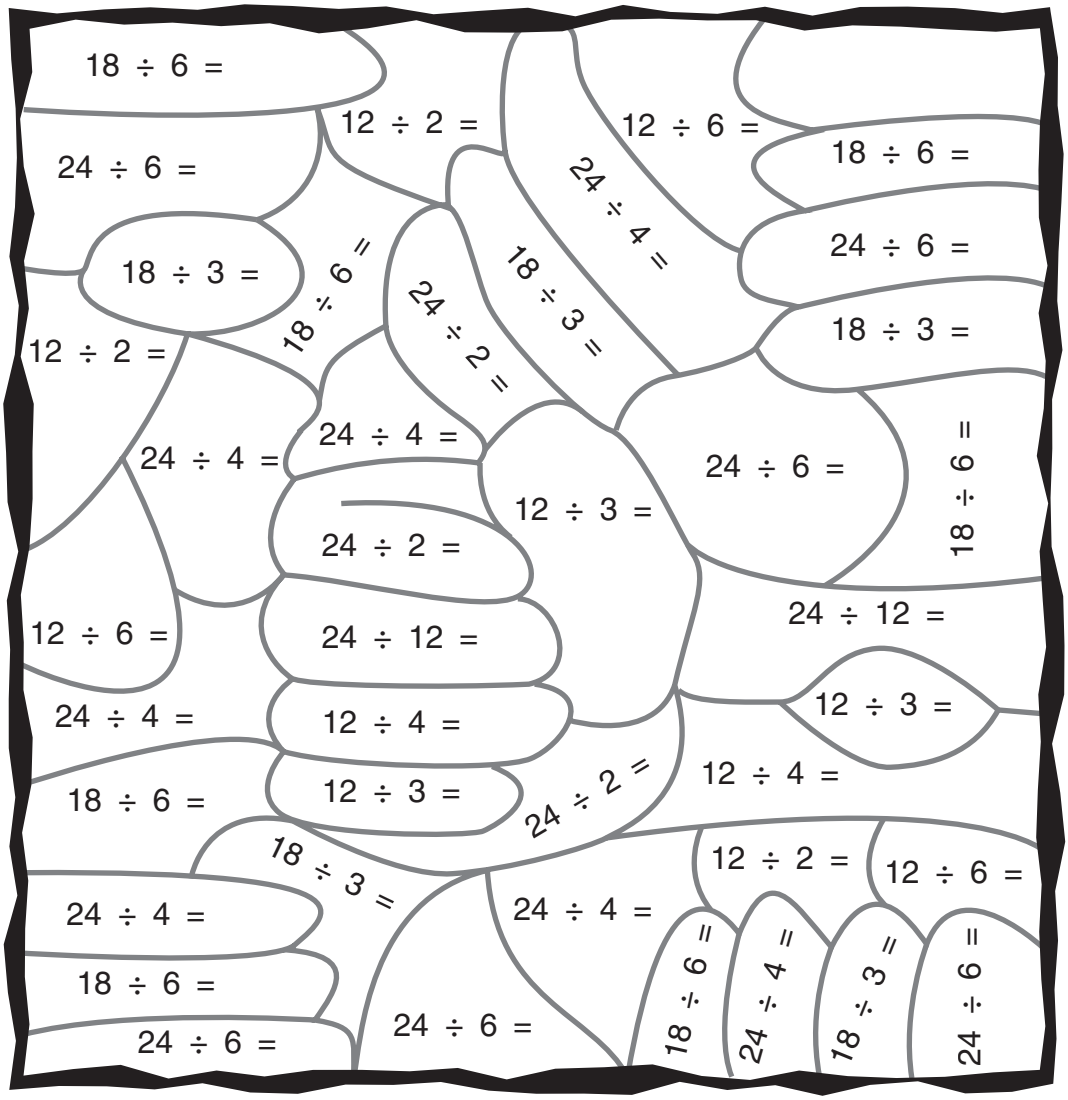
_____



Blue

_____

_____



Demonstrate division in a conceptual form (single-digit divisors)

Division Facts

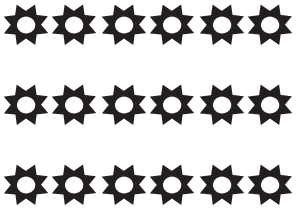
Name _____

Each model represents two different division facts.

This model could represent **12 ÷ 6** or **12 ÷ 2**.

Write two division facts for each model.

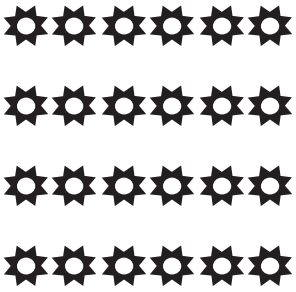
1.



_____

_____

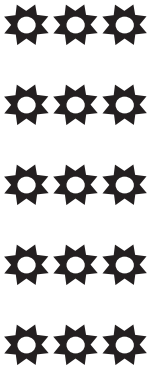
2.



_____

_____

3.



_____

_____

Draw a model to represent each division fact.

4. 8 ÷ 4 = 2	**5.** 12 ÷ 3 = 4

Demonstrate division in a conceptual form (single-digit divisors)

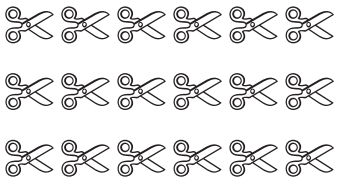
Division Models

Name _____

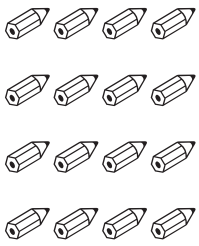
Each model represents two different division facts.

This model could represent

18 ÷ 6 or **18 ÷ 3**.



Write two division facts for each model.

1. 

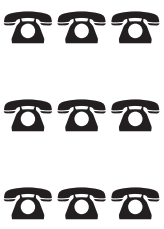
_____

_____

2. 

_____

_____

3. 

_____

_____

Draw a model to represent each division fact.

4. 18 ÷ 6 = 3	**5.** 9 ÷ 3 = 3

Demonstrate division in a conceptual form (single-digit divisors)

Draw a Picture

Name _____

Draw a picture to illustrate each problem. Then solve each problem.

1. Jerry has 18 candy bars that he would like to divide evenly between himself and 5 other friends. How many candy bars will each person receive?

_____

2. Carol and her 4 sisters earned $25 for baby-sitting. How much should each one receive if they divide the money evenly?

_____

3. Beverly has a bag of candy and wants to share it with the 6 students in her reading group (the 6 includes Beverly). If there are 30 pieces of candy in the bag, how many pieces of candy does each person get?

_____

4. John has 28 stickers. He wants to put one sticker on each of the 4 corners of each page in his notebook. How many pages will have stickers?

_____

If there are 10 pages in the book, how many more stickers does he need to put stickers on every page?

_____

Demonstrate division in a conceptual form (single-digit divisors)

Math Test

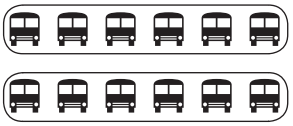
Name _____

Fill in the circle next to the correct answer.

1. Which of these represents 6 ÷ 2 = 3?

Ⓐ 

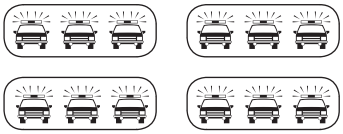
Ⓑ 

Ⓒ 

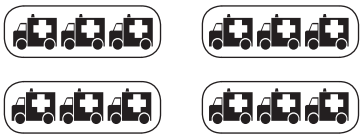
Ⓓ 

2. Which of these does NOT represent 12 ÷ 3 = 4 ?

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

3. Which of these represents 5 ÷ 1 = 5 ?

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

4. Which of these is illustrated by this model?

Ⓐ 9 ÷ 3 = 3
Ⓑ 18 ÷ 9 = 2
Ⓒ 18 ÷ 3 = 6
Ⓓ 15 ÷ 3 = 5

5. Which of the following is illustrated by this model?

Ⓐ 24 ÷ 8 = 3
Ⓑ 18 ÷ 3 = 6
Ⓒ 16 ÷ 8 = 2
Ⓓ 12 ÷ 3 = 4

6. 24 ÷ 3 = _____

Ⓐ 6
Ⓑ 4
Ⓒ 12
Ⓓ none of the above

7. 12 ÷ 4 = _____

Ⓐ 3
Ⓑ 4
Ⓒ 6
Ⓓ none of the above

8. 15 ÷ 5 = _____

Ⓐ 10
Ⓑ 5
Ⓒ 3
Ⓓ none of the above

9. Draw a picture of what 21 divided by 7 means.

10. Juanita has 27 pieces of gum to divide evenly among 9 people. Draw a picture to show how many pieces of gum each person will get.

Demonstrate division in a conceptual form (single-digit divisors)

What Did the Car Have on Its Toast This Morning?

Name _____

Solve each division problem. Then write the letter on the line for each answer. The letters will spell out the answer to the riddle.

A	12 ÷ 6 = 2	**J**	28 ÷ 7 = _____
C	54 ÷ 9 = _____	**M**	64 ÷ 8 = _____
F	20 ÷ 4 = _____	**R**	49 ÷ 7 = _____
I	36 ÷ 4 = _____	**T**	27 ÷ 9 = _____

____	____	A	____	____	____	____
3	7	2	5	5	9	6

____	A	____
4	2	8

Demonstrate division facts (through divisors of nine)

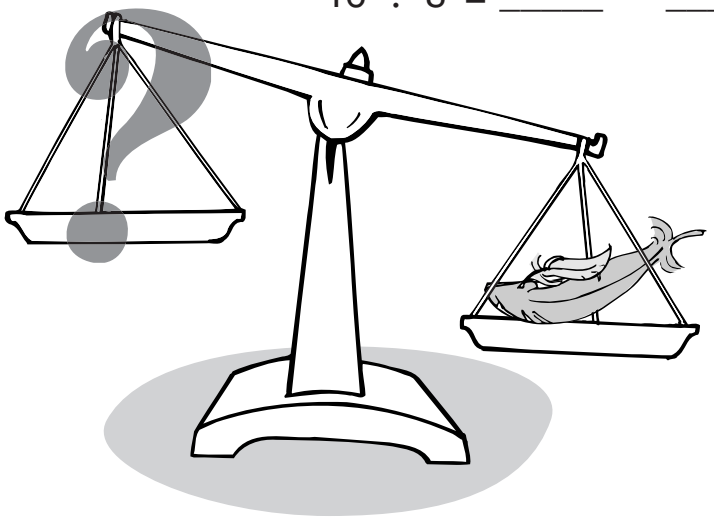
What Kind of House Weighs the Least?

Name _____

Solve each division problem. Then write the letter on the line for each answer. The letters will spell out the answer to the riddle.

8 ÷ 8 =	1	A
48 ÷ 8 =	_____	_____
25 ÷ 5 =	_____	_____
9 ÷ 3 =	_____	_____
12 ÷ 3 =	_____	_____
27 ÷ 3 =	_____	_____
24 ÷ 6 =	_____	_____
49 ÷ 7 =	_____	_____
0 ÷ 5 =	_____	_____
56 ÷ 7 =	_____	_____
16 ÷ 8 =	_____	_____

1	A
2	E
3	G
4	H
5	I
6	L
7	O
8	S
9	T
0	U



Demonstrate division facts (through divisors of nine)

Quick Answers

Name _____

Complete the following division problems as quickly as you can.

1.	24 ÷ 8 = _____	12 ÷ 6 = _____	8 ÷ 8 = _____
2.	42 ÷ 7 = _____	63 ÷ 7 = _____	21 ÷ 7 = _____
3.	27 ÷ 9 = _____	72 ÷ 8 = _____	3 ÷ 1 = _____
4.	35 ÷ 5 = _____	7 ÷ 7 = _____	45 ÷ 9 = _____
5.	63 ÷ 9 = _____	0 ÷ 7 = _____	7 ÷ 1 = _____
6.	49 ÷ 7 = _____	64 ÷ 8 = _____	15 ÷ 5 = _____
7.	18 ÷ 6 = _____	25 ÷ 5 = _____	30 ÷ 5 = _____
8.	9 ÷ 3 = _____	36 ÷ 6 = _____	10 ÷ 5 = _____
9.	14 ÷ 7 = _____	12 ÷ 2 = _____	10 ÷ 2 = _____
10.	45 ÷ 5 = _____	18 ÷ 9 = _____	54 ÷ 6 = _____
11.	24 ÷ 6 = _____	12 ÷ 4 = _____	8 ÷ 2 = _____
12.	40 ÷ 5 = _____	20 ÷ 5 = _____	9 ÷ 1 = _____
13.	48 ÷ 8 = _____	16 ÷ 8 = _____	
14.	42 ÷ 6 = _____	0 ÷ 5 = _____	

How long did it take you to complete all the problems? _____

How many did you get correct? _____

Demonstrate division facts (through divisors of nine)

Division Facts

Name _____

Complete the following division problems as quickly as you can.

1.	28 ÷ 4 = _____	6 ÷ 2 = _____	21 ÷ 7 = _____
2.	15 ÷ 5 = _____	72 ÷ 8 = _____	9 ÷ 3 = _____
3.	30 ÷ 5 = _____	24 ÷ 6 = _____	24 ÷ 4 = _____
4.	3 ÷ 1 = _____	0 ÷ 7 = _____	28 ÷ 7 = _____
5.	49 ÷ 7 = _____	72 ÷ 9 = _____	36 ÷ 9 = _____
6.	27 ÷ 3 = _____	8 ÷ 8 = _____	32 ÷ 8 = _____
7.	40 ÷ 8 = _____	12 ÷ 4 = _____	35 ÷ 5 = _____
8.	20 ÷ 5 = _____	18 ÷ 6 = _____	6 ÷ 6 = _____
9.	4 ÷ 4 = _____	48 ÷ 6 = _____	0 ÷ 9 = _____
10.	16 ÷ 8 = _____	25 ÷ 5 = _____	24 ÷ 8 = _____
11.	18 ÷ 2 = _____	6 ÷ 3 = _____	40 ÷ 5 = _____
12.	5 ÷ 5 = _____	10 ÷ 5 = _____	64 ÷ 8 = _____
13.	54 ÷ 9 = _____	14 ÷ 7 = _____	
14.	0 ÷ 2 = _____	18 ÷ 3 = _____	

How long did it take you to complete all the problems? _____

How many did you get correct? _____

Demonstrate division facts (through divisors of nine)

Using Division

Name _____

Solve each problem.

1. Jennifer was dividing 64 cookies between herself and her 7 cousins. How many cookies does each get if she divides them evenly?

_____

2. John has 24 brownies. He would like to divide them evenly into groups. What are some possible groups that he could divide them into evenly?

_____

3. Virginia has 48 balloons. In her class are 8 tables. She wants to put the same number of balloons on each table for a class party at 3:00. How many balloons should she put on each table?

_____

4. Paul is writing a book to give to a guest teacher. He has 8 pages in the book and wants all 72 students to sign the book. How many signatures should he get on each page so that all pages have the same number of signatures?

_____

5. Bill has 2 dozen cupcakes that he wants to divide equally between himself, his 5 brothers, 3 sisters, and 3 friends. How many cupcakes should each person get? Show how you found your answer.

_____

Demonstrate division facts (through divisors of nine)

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 42 ÷ 7 = _____

Ⓐ 8
Ⓑ 7
Ⓒ 6
Ⓓ none of the above

2. 72 ÷ 9 = _____

Ⓐ 8
Ⓑ 7
Ⓒ 9
Ⓓ none of the above

3. 35 ÷ 5 = _____

Ⓐ 8
Ⓑ 7
Ⓒ 6
Ⓓ none of the above

4. 24 ÷ 4 = _____

Ⓐ 5
Ⓑ 3
Ⓒ 8
Ⓓ none of the above

5. Which of the following does NOT equal 6?

Ⓐ 24 ÷ 4
Ⓑ 18 ÷ 3
Ⓒ 30 ÷ 5
Ⓓ none of the above

6. Which of the following does NOT equal 3?

Ⓐ 18 ÷ 6
Ⓑ 12 ÷ 4
Ⓒ 16 ÷ 4
Ⓓ none of the above

7. Which of the following equals 8?

Ⓐ 72 ÷ 8
Ⓑ 56 ÷ 7
Ⓒ 49 ÷ 7
Ⓓ none of the above

8. Which of the following equals 5?

Ⓐ 30 ÷ 5
Ⓑ 42 ÷ 7
Ⓒ 24 ÷ 6
Ⓓ none of the above

9. Write three division problems that all have the answer of 4.

_____

_____

_____

10. Jeremy has 75 tickets. He wants to give 3 to his little sister and divide the remaining tickets between himself and his 7 friends. How many tickets will each of his friends get?

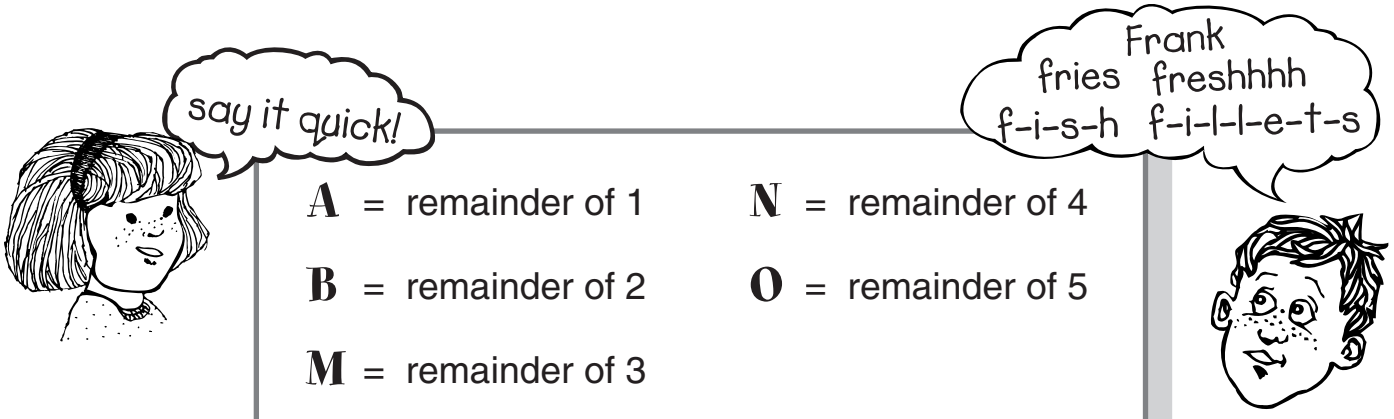
_____

Demonstrate division facts (through divisors of nine)

Tongue Twister

Name _____

Solve each division problem. Then write the letter for each remainder on the line. Read the tongue twister and try to say it quickly three times.



A = remainder of 1

B = remainder of 2

M = remainder of 3

N = remainder of 4

O = remainder of 5

17 ÷ 5 =	3	remainder of 2	B
15 ÷ 7 =	_____	remainder of _____	_____
26 ÷ 4 =	_____	remainder of _____	_____
54 ÷ 7 =	_____	remainder of _____	_____
61 ÷ 8 =	_____	remainder of _____	_____
44 ÷ 5 =	_____	remainder of _____	_____
20 ÷ 9 =	_____	remainder of _____	_____
6 ÷ 5 =	_____	remainder of _____	_____
18 ÷ 5 =	_____	remainder of _____	_____
10 ÷ 4 =	_____	remainder of _____	_____
69 ÷ 8 =	_____	remainder of _____	_____
37 ÷ 8 =	_____	remainder of _____	_____

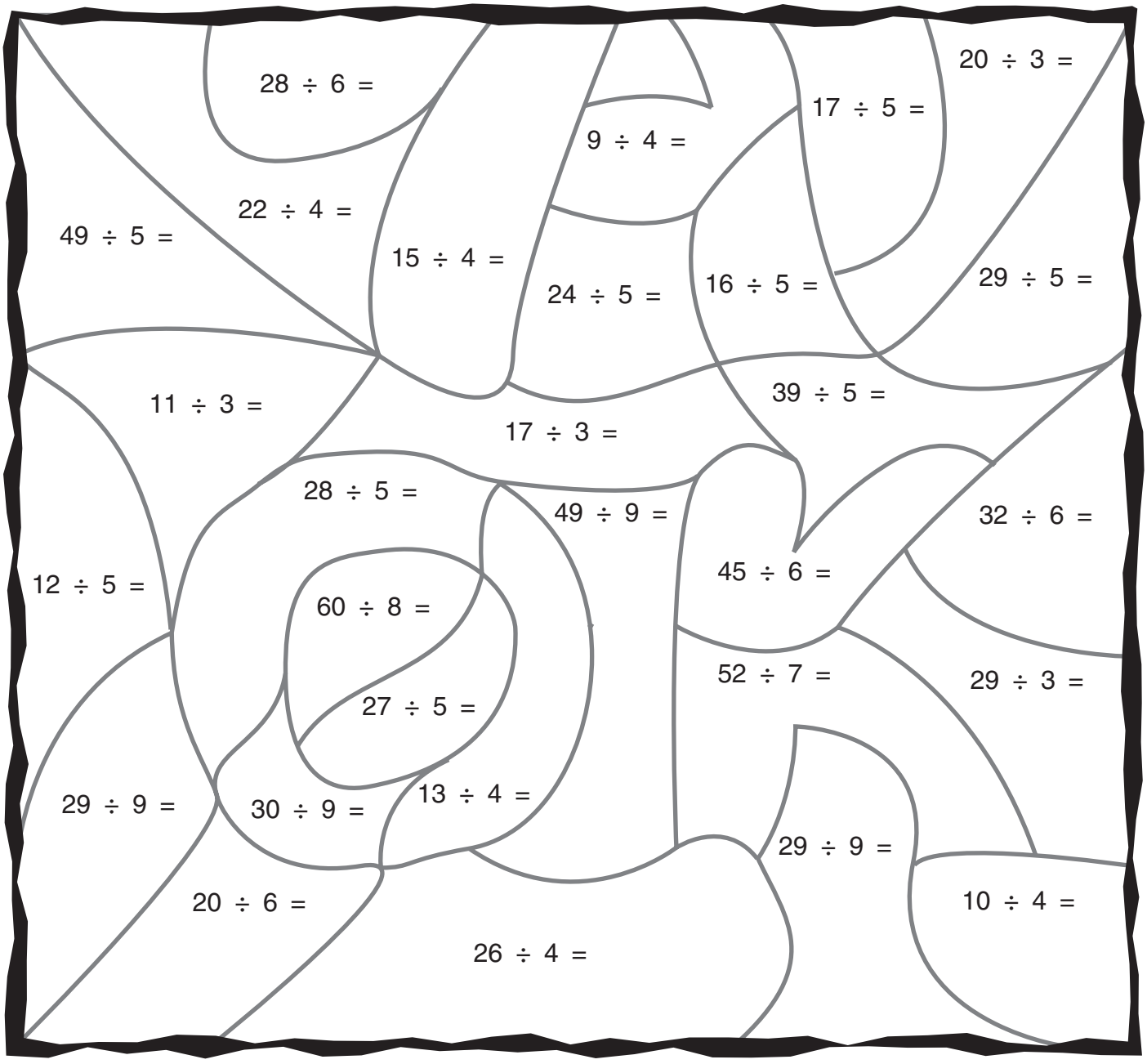
Demonstrate division with remainders (single-digit divisors)

What's Hiding?

Name _____

Complete each division problem in the picture below. Then look at each remainder and color each space, using this key.

Red = remainder of 1	**Red** = remainder of 3
Blue = remainder of 2	**Blue** = remainder of 4



Demonstrate division with remainders (single-digit divisors)

Is There a Remainder?

Name _____

Solve each division problem. If there is a remainder, be sure to include that in your answer.

1. 84 ÷ 9 = _____

2. 49 ÷ 5 = _____

3. 37 ÷ 5 = _____

4. 29 ÷ 7 = _____

5. 84 ÷ 7 = _____

6. 62 ÷ 8 = _____

7. 28 ÷ 4 = _____

8. 73 ÷ 9 = _____

9. 68 ÷ 8 = _____

10. 15 ÷ 7 = _____

20 ÷ 6

35 ÷ 7

11. Write a sentence answering this question: What is a remainder?

_____

_____

_____

12. Write a sentence explaining what is meant if there is no remainder.

_____

_____

_____

Demonstrate division with remainders (single-digit divisors)

Remainders

Name _____

Solve each division problem. If there is a remainder, be sure to include that in your answer.

1. $9\overline{)62}$ **2.** $8\overline{)42}$ **3.** $9\overline{)46}$ **4.** $6\overline{)27}$ **5.** $4\overline{)84}$

6. $9\overline{)55}$ **7.** $8\overline{)28}$ **8.** $6\overline{)59}$ **9.** $7\overline{)52}$ **10.** $8\overline{)15}$

11. Write a sentence explaining what division is.

_____

_____

_____

12. Write a sentence explaining what is meant if there is a remainder.

_____

_____

_____

Demonstrate division with remainders (single-digit divisors)

Interpreting Remainders

Name _____

What is the most appropriate thing to do with any remainders in each of these situations?

1. Susy and her friends are sharing cookies among the four of them, and there are two left over.

_____

2. Mark and his friend are sharing dimes that they found, and there is one left over.

_____

3. Juan and Julia are sharing balloons from a package the teacher gave them, and there is one left over.

_____

4. Shane and Sarah are sharing time playing video games, and there are 8 minutes left over.

_____

Solve each of these problems.

5. Sherry's mom is making banners for the students in Sherry's class. She needs 9 inches of fabric for each one and has 8 feet of fabric. How many banners can she make from the 8 feet of fabric? How much fabric will be left over?

_____

6. Tristan is packaging cupcakes for the school bake sale. Julie brought in 16 cupcakes, Mary brought in 20 cupcakes, and Mark brought in 28 cupcakes. If Tristan is packaging them with 9 on a plate, how many cupcakes will be left over for the kids to snack on?

_____

7. Amber is passing out markers to the students in her reading group. There are 7 students in her group. If she starts with a canister of 55 markers, how many will each student get? Will there be any extras? If so, how many are left over?

_____

Demonstrate division with remainders (single-digit divisors)

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 84 ÷ 9 = _____

Ⓐ 9 remainder 3
Ⓑ 8 remainder 4
Ⓒ 9 remainder 4
Ⓓ 8 remainder 3

2. 56 ÷ 9 = _____

Ⓐ 5 remainder 6
Ⓑ 6 remainder 2
Ⓒ 6 remainder 4
Ⓓ none of the above

3. 73 ÷ 9 = _____

Ⓐ 8 remainder 2
Ⓑ 7 remainder 1
Ⓒ 8 remainder 3
Ⓓ none of the above

4. 35 ÷ 8 = _____

Ⓐ 3 remainder 3
Ⓑ 4 remainder 3
Ⓒ 4 remainder 4
Ⓓ none of the above

5. Which of the following has a remainder of 2?

Ⓐ 83 ÷ 9
Ⓑ 42 ÷ 6
Ⓒ 35 ÷ 8
Ⓓ 24 ÷ 9

6. Which of the following has a remainder of 3?

Ⓐ 25 ÷ 5
Ⓑ 32 ÷ 9
Ⓒ 28 ÷ 9
Ⓓ none of the above

7. Which of the following does NOT have a remainder of 2?

Ⓐ 9 ÷ 4
Ⓑ 12 ÷ 5
Ⓒ 18 ÷ 4
Ⓓ none of the above

8. Which of the following does NOT have a remainder of 4?

Ⓐ 24 ÷ 5
Ⓑ 40 ÷ 6
Ⓒ 30 ÷ 8
Ⓓ none of the above

---

9. What is a remainder?

_____

_____

_____

10. Henry and Louise are gathering shells to share with their family. There are a total of 5 people in their family. If they collect 97 shells, how many should they give to each family member? Will there be any extras? If so, what could they do with the extras?

_____

_____

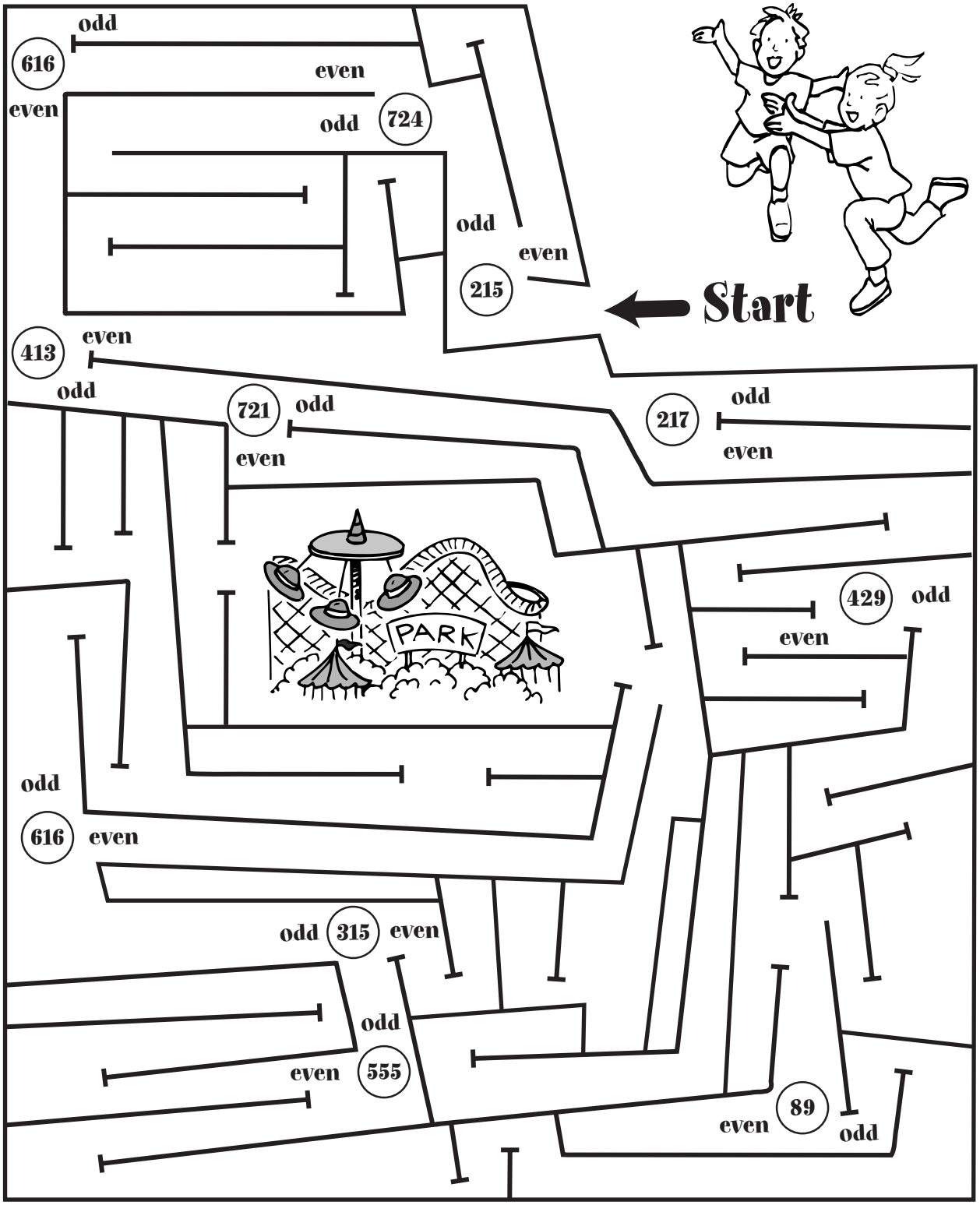
_____

Demonstrate division with remainders (single-digit divisors)

Amusement Park

Name _____

Using a crayon, draw a path through the maze. At each circled number, decide if the number is odd or even and continue through the maze to the Amusement Park.

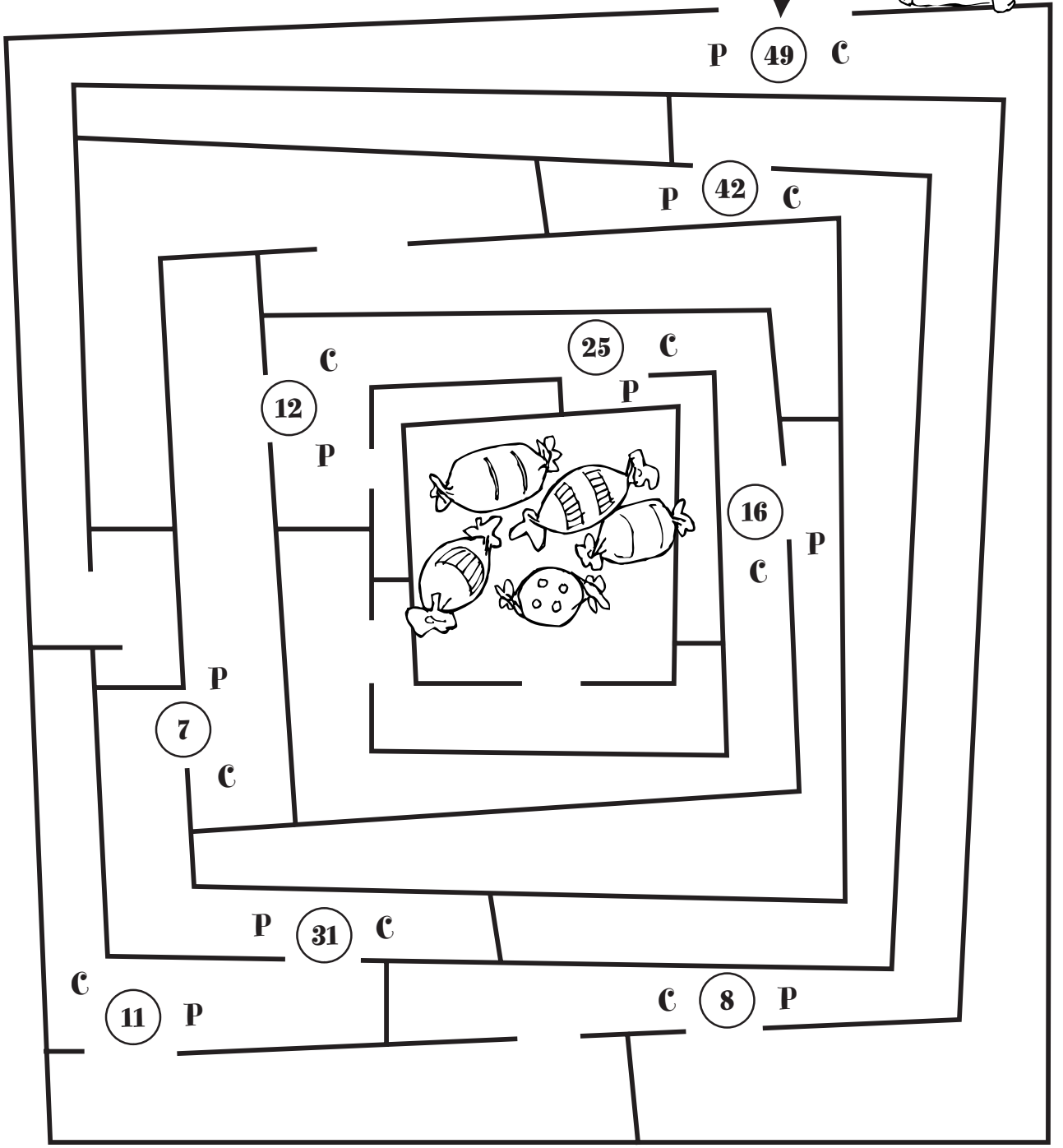


Identify any number as odd or even, and numbers under 100 as prime or composite

Candy Store

Name _____

Using a crayon, draw a path through the maze. At each circled number, decide if the number is prime (P) or composite (C) and continue your path until you get to the Candy Store.



Identify any number as odd or even, and numbers under 100 as prime or composite

Odd or Even?

Name _____

Look at each of the following numbers. Circle **odd** or **even** for each number.

1.	285	**odd**	**even**	**13.**	216	**odd**	**even**
2.	482	**odd**	**even**	**14.**	624	**odd**	**even**
3.	97	**odd**	**even**	**15.**	134	**odd**	**even**
4.	31	**odd**	**even**	**16.**	827	**odd**	**even**
5.	53	**odd**	**even**	**17.**	501	**odd**	**even**
6.	523	**odd**	**even**	**18.**	419	**odd**	**even**
7.	624	**odd**	**even**	**19.**	481	**odd**	**even**
8.	56	**odd**	**even**	**20.**	820	**odd**	**even**
9.	63	**odd**	**even**	**21.**	480	**odd**	**even**
10.	3	**odd**	**even**	**22.**	28	**odd**	**even**
11.	32	**odd**	**even**	**23.**	7	**odd**	**even**
12.	25	**odd**	**even**	**24.**	6	**odd**	**even**

Identify any number as odd or even, and numbers under 100 as prime or composite

Finding Prime Numbers

Name _____

Follow the directions to find prime numbers.

1. Use a black crayon to cross out the number 1 since it is neither prime nor composite.
2. Use a red crayon to circle the number 2. This number is the first prime number.
3. Use a blue crayon to cross out all even numbers since 2 goes into all even numbers.
4. Use a red crayon to circle the 3. This is the next-smallest prime number.
5. Use the blue crayon to cross out all multiples of 3 that have not already been marked out.
6. Continue alternating between the red and blue crayon following steps 4 and 5 until all the numbers on the chart have either been crossed out or circled.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

List all the prime numbers (circled in red) between 1 and 100. _____

_____

Identify any number as odd or even, and numbers under 100 as prime or composite

Problem Solving

Name _____

Solve each problem.

1. Julie, a carpenter, has two measuring sticks. The lengths of the two measuring sticks are the two prime numbers between 4 and 10. What are the lengths of the measuring sticks? If Julie wants to cut a length of 1 unit, how can this be done with the fewest number of cuts?

_____

2. Kyle is another carpenter. He has three measuring sticks. The lengths of his sticks are the prime numbers between 6 and 15. He needs to create a length of 8. How might Kyle do this with his three measuring sticks?

_____

3. Shirley claims that any time you add two odd numbers together that the answer is always even. Do you think that she is correct? Write a few examples and see what the answers are.

_____

4. Similarly, Jonathan notices that if you add two even numbers together that the sum is always even. Do you think that is always true? Write a few examples and see what the answers are.

_____

5. Juan says that if you add an even number and an odd number together, that the answer will always be odd. Do you agree with this claim? If so, why do you think that is true? If not, give an example of an even number and an odd number that when added together, give you an even sum instead of an odd sum.

_____

Identify any number as odd or even, and numbers under 100 as prime or composite

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Which of the following is an odd number?

Ⓐ 26 Ⓒ 29
Ⓑ 44 Ⓓ 36

2. Which of the following is an even number?

Ⓐ 51 Ⓒ 72
Ⓑ 83 Ⓓ 77

3. Which of the following is NOT an odd number?

Ⓐ 45 Ⓒ 95
Ⓑ 31 Ⓓ 98

4. Which of the following is NOT an even number?

Ⓐ 31 Ⓒ 42
Ⓑ 62 Ⓓ 96

5. Which of the following is a prime number?

Ⓐ 9 Ⓒ 18
Ⓑ 16 Ⓓ 11

6. Which of the following is a composite number?

Ⓐ 13 Ⓒ 19
Ⓑ 17 Ⓓ 15

7. Which of the following is NOT a prime number?

Ⓐ 6 Ⓒ 7
Ⓑ 3 Ⓓ 5

8. Which of the following is NOT a composite number?

Ⓐ 14 Ⓒ 19
Ⓑ 16 Ⓓ 18

9. List five even numbers greater than 45.

_____

10. List all the prime numbers between 10 and 30.

_____

_____

_____

Identify any number as odd or even, and numbers under 100 as prime or composite

Baseball Riddle

Name _____

Each set of numbers is a list of factors. Find the smallest number (larger than all the given factors) that has all of these numbers as factors. Then write the letter on the line above that number. The letters will spell out the answer.

A	1, 3, 4 12	**N**	1, 3, 5 _____
C	1, 5, 7 _____	**P**	1, 2, 3, 6, 9 _____
E	1, 2, 4 _____	**R**	1, 2, 4, 7, 14 _____
G	1, 2, 4, 8 _____	**S**	1, 3 _____
H	1, 2, 3 _____	**T**	1, 2, 4, 8, 16 _____
I	1, 2, 3, 5, 6 _____	**W**	1, 3, 11 _____
L	1, 2, 3, 4, 6, 8, 12 _____	**Y**	1, 2, 3, 6, 7, 14, 21 _____

Why did the young baseball player chase his sister around the field?

_____	_____		_____	A	_____	
6	8		33	12	9	
_____	_____	A	_____	_____	_____	_____
18	24	12	42	30	15	16
_____	A	_____	_____	_____	_____	_____
35	12	32	35	6	6	8

_____	_____	_____
28		

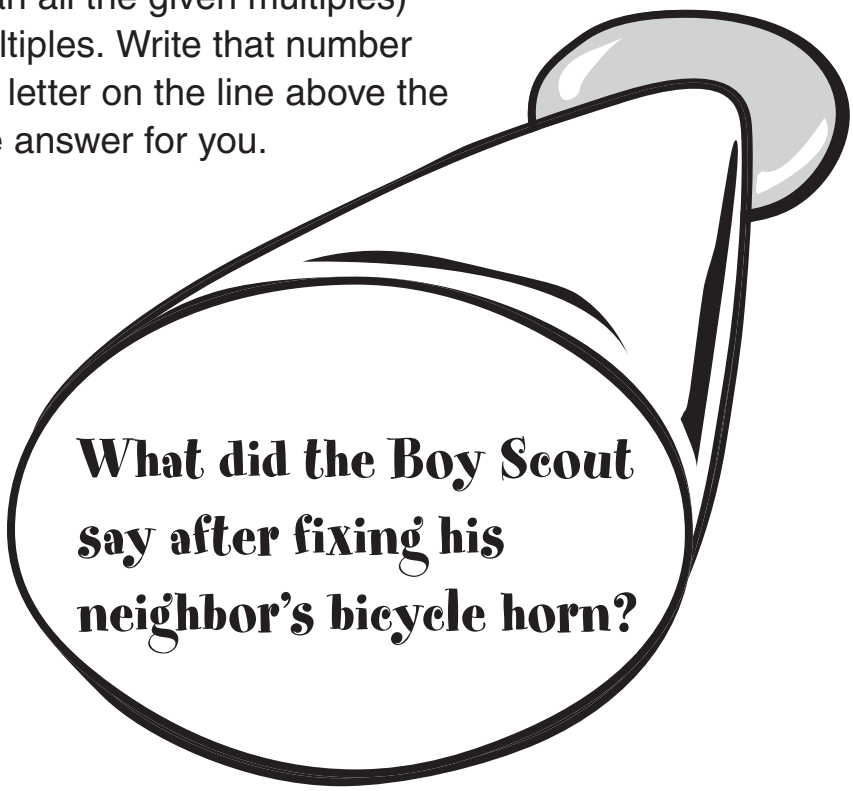
Identify factors of numbers less than 100 and multiples of single-digit numbers

Riddle

Name _____

Each set of numbers is a list of multiples of a certain number. Find the largest number (smaller than all the given multiples) that has all of these numbers as multiples. Write that number next to the multiples. Then write the letter on the line above the number. The letters will spell out the answer for you.

A	10, 20, 35, 40	_____
B	28, 14, 35, 49	_____
D	12, 24, 36, 30	_____
E	12, 16, 28, 32	_____
I	12, 9, 15, 21	_____
P	24, 16, 40, 56	_____
R	36, 54, 27, 18	_____



_____	_____	_____	_____
7	4	4	8

_____	_____	_____	_____	_____	_____	_____	_____
9	4	8	5	3	9	4	6

Identify factors of numbers less than 100 and multiples of single-digit numbers

Find the Multiples

Name _____

Use the hundreds table as you follow the directions.

1. Use a red crayon and circle all the multiples of 5. Look for a pattern.

2. Use a blue crayon and cross out all the multiples of 3. Look for a pattern.

3. Use a green crayon and draw a triangle on all the multiples of 2. Look for a pattern.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

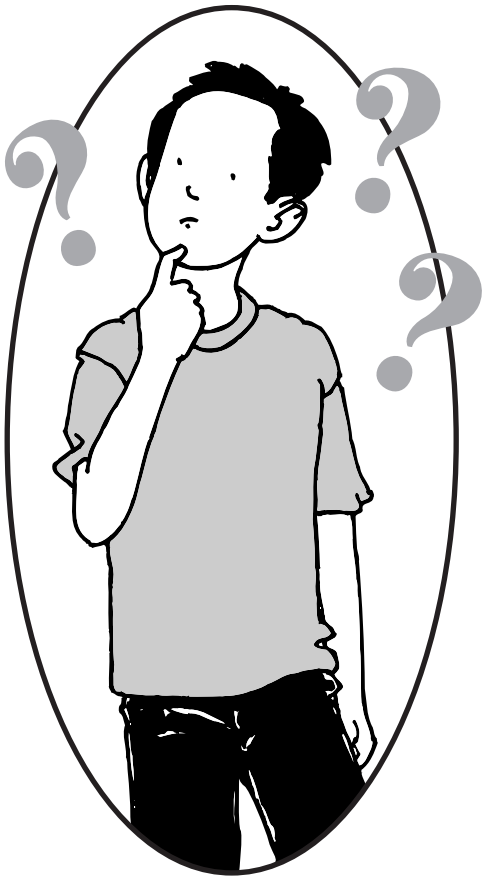
Identify factors of numbers less than 100 and multiples of single-digit numbers

Finding Factors

Name _____

List all the factors for each number.

1. 8 _____
2. 12 _____
3. 15 _____
4. 21 _____
5. 24 _____
6. 9 _____
7. 32 _____
8. 7 _____
9. 6 _____
10. 16 _____
11. 35 _____
12. 40 _____
13. 25 _____
14. 45 _____
15. 42 _____
16. 31 _____
17. 22 _____
18. 18 _____
19. 5 _____
20. 10 _____



Skill practice copy here Identify factors of numbers less than 100 and multiples of single-digit numbers

Using Factors and Multiples

Name _____

Solve each problem.

1. Gerald has 24 baseball cards and wants to know all the different ways that he can divide them evenly. What are all the ways that he can stack his baseball cards with each stack having the same number of cards?

_____

2. Cupcakes from the Hilltop Bakery are wrapped in packages of 3. The bakers want to put several packages into a larger box. What are four possible numbers of cupcakes that could appear in this larger box?

_____

3. Julie has a stamp collection and would like to arrange 12 stamps on each page of her new book. What are all the possible arrangements of stamps that she could use if she wants to have the same number of stamps in every row? Which arrangement do you think would be the best and why?

_____

_____

4. Christy saw some packages of erasers at the grocery store. Each package had 9 erasers in it. Christy grabbed a handful of packages, less than 8 but more than 3. List all the possible numbers of erasers she could be holding in her hand.

_____

5. In the library are some magazine holders. There are 6 magazine holders and each one holds the same number of magazines, at least 8. What are the four smallest possible numbers of magazines that are held in all 6 holders?

_____

Identify factors of numbers less than 100 and multiples of single-digit numbers

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Which of the following is a multiple of 5?

Ⓐ 27 Ⓒ 85
Ⓑ 93 Ⓓ 16

2. Which of the following is a factor of 8?

Ⓐ 4 Ⓒ 5
Ⓑ 3 Ⓓ 6

3. Which of the following is NOT a multiple of 3?

Ⓐ 15 Ⓒ 31
Ⓑ 27 Ⓓ 60

4. Which of the following is NOT a factor of 40?

Ⓐ 3 Ⓒ 20
Ⓑ 8 Ⓓ 10

5. Which of the following lists the first five multiples of 2?

Ⓐ 4, 8, 12, 16, 20
Ⓑ 2, 4, 6, 8, 10
Ⓒ 1, 2, 4, 6, 8
Ⓓ 1, 3, 5, 7, 9

6. Which of the following lists the first five multiples of 6?

Ⓐ 12, 24, 30, 48, 60
Ⓑ 1, 2, 3, 4, 6
Ⓒ 12, 18, 24, 30, 36
Ⓓ 6, 12, 18, 24, 30

7. Which of the following lists all the factors of 12?

Ⓐ 1, 2, 3, 4, 6, 12
Ⓑ 2, 3, 4, 6, 12
Ⓒ 2, 3, 4, 6
Ⓓ 1, 2, 3, 4, 6, 8, 12

8. Which of the following lists all the factors of 17?

Ⓐ 1, 2, 8, 17
Ⓑ 1, 3, 17
Ⓒ 1, 17
Ⓓ 1, 5, 17

9. List the smallest eight prime numbers.

_____

_____

10. List the first five multiples of 8.

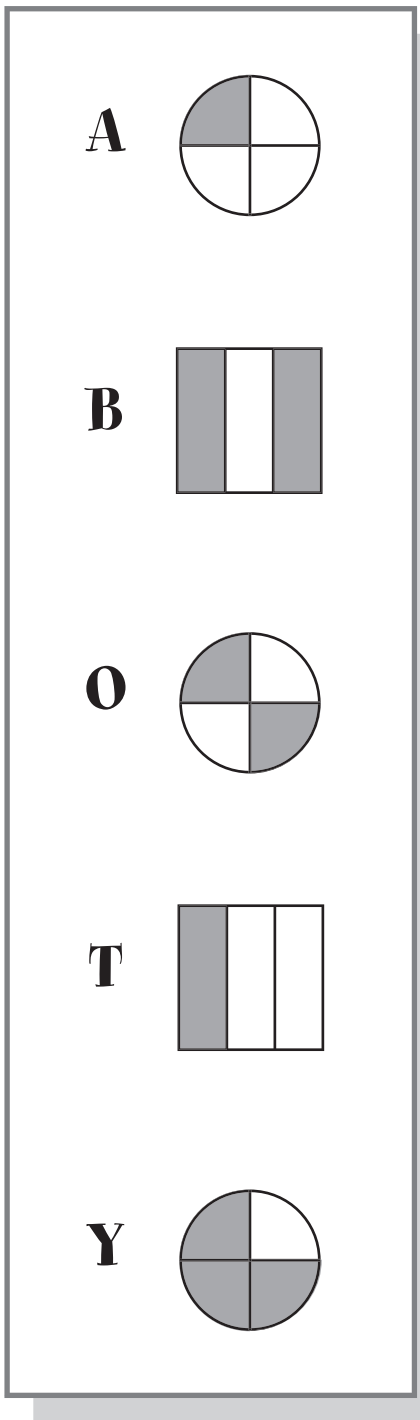
_____

Identify factors of numbers less than 100 and multiples of single-digit numbers

Tongue Twister

Name _____

Write the letter for each fraction model on the lines above each fraction. This will spell out a tongue twister. Try to say it quickly three times in a row.



_____ _____ _____

$\frac{1}{3}$ $\frac{2}{4}$ $\frac{3}{4}$

_____ _____ _____ _____

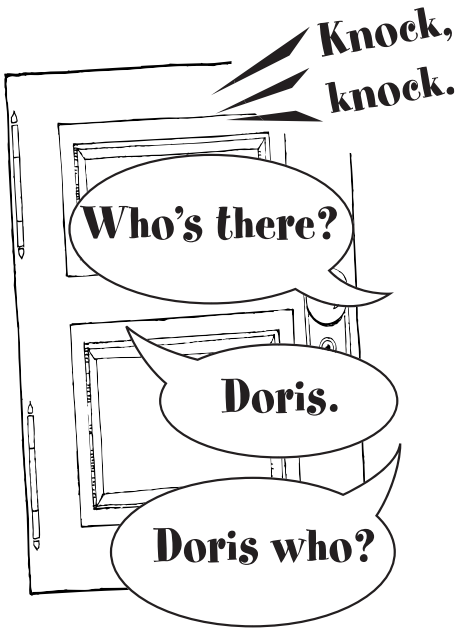
$\frac{2}{3}$ $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{3}$

Identify halves, thirds, and fourths (including fractions greater than one), and compare fractions

Knock-Knock Joke

Name _____

Write the fractions in order under each line. You may use the number line at the bottom of the page to help you. Then write the letter for each fraction on the lines. The letters will spell out the last line of the knock-knock joke.



$3\frac{1}{3}$ W	$1\frac{1}{3}$ O	$\frac{3}{4}$ S	$1\frac{3}{4}$ E
$1\frac{1}{4}$ L	$2\frac{1}{4}$ T	2 D	$4\frac{3}{4}$ E
5 D	$4\frac{1}{3}$ O	$4\frac{2}{3}$ K	$3\frac{1}{2}$ H
$3\frac{3}{4}$ I	$4\frac{1}{2}$ C	3 S	$\frac{2}{3}$ I
$2\frac{3}{4}$ K	$1\frac{1}{2}$ C	$\frac{1}{4}$ D	$2\frac{1}{3}$ H
$1\frac{2}{3}$ K	$4\frac{1}{4}$ N	$\frac{1}{3}$ O	4 K
$2\frac{1}{2}$ A	$3\frac{2}{3}$ Y	$\frac{1}{2}$ R	

O

$\frac{1}{4}$ $\frac{1}{3}$ ___ ___ $\frac{3}{4}$ $1\frac{1}{4}$ ___ ___ ___ ___ 2

,

$2\frac{1}{4}$ ___ ___ ___ 3 $3\frac{1}{3}$ ___ $3\frac{2}{3}$

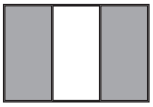
$3\frac{3}{4}$ 4 ___ ___ ___ ___ ___ 5

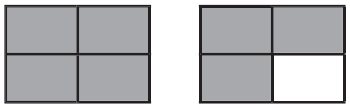
Identify halves, thirds, and fourths (including fractions greater than one), and compare fractions

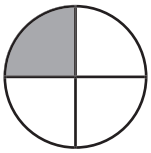
Naming Fractions

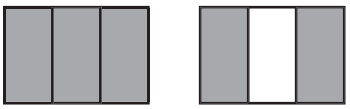
Name _____

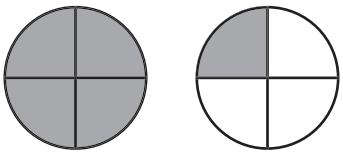
Write the fraction that is represented by the shaded part(s) in each figure.
Are there any other fraction names that could name the same region?

1.  _____

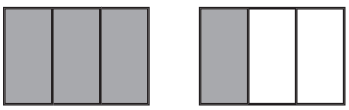
2.  _____

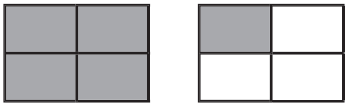
3.  _____

4.  _____

5.  _____

6.  _____

7.  _____

8.  _____

Identify halves, thirds, and fourths (including fractions greater than one), and compare fractions

Comparing Fractions

Name _____

Write **<**, **>**, or **=** in the blank for each math sentence.

1. $1\frac{2}{3}$ _____ $2\frac{1}{3}$

2. $4\frac{1}{4}$ _____ $4\frac{1}{2}$

3. $6\frac{1}{3}$ _____ $6\frac{1}{2}$

4. $9\frac{1}{4}$ _____ $9\frac{3}{4}$

5. $2\frac{3}{4}$ _____ $3\frac{1}{2}$

6. $\frac{3}{4}$ _____ $1\frac{1}{2}$

7. $2\frac{1}{2}$ _____ $2\frac{2}{4}$

8. $8\frac{1}{3}$ _____ $5\frac{3}{4}$

9. $2\frac{1}{2}$ _____ $2\frac{3}{4}$

10. $5\frac{1}{2}$ _____ $5\frac{3}{4}$

11. $6\frac{1}{2}$ _____ $6\frac{1}{3}$

12. $7\frac{1}{3}$ _____ $6\frac{2}{3}$

13. $8\frac{1}{4}$ _____ $8\frac{2}{4}$

14. $5\frac{2}{4}$ _____ $5\frac{1}{2}$

15. $3\frac{1}{2}$ _____ $4\frac{1}{2}$

Identify halves, thirds, and fourths (including fractions greater than one), and compare fractions

Using Fractions

Name _____

Solve each problem.

1. Shirley is baking bread and wants to make just half of the recipe. The original recipe calls for 4 eggs. How many eggs will she need for half the recipe?

_____

2. Molly and Jose took a spelling test with 10 questions. If Molly missed half of the words and Jose missed 6 of the words, who missed more?

_____

3. Jimmy and Marisol took a math test with 100 questions. Jimmy missed $\frac{1}{4}$ of the questions while Marisol got $\frac{3}{4}$ of the questions right. Who had the better score?

_____

4. Alec brought two quarters to school with him. Sandy brought one half-dollar with her. Alec and Sandy disagreed about who had more money. Write a short note to these two students telling them who has more money.

_____

_____

_____

5. Adam missed half of the questions on his test while Katie missed 7 of the 10 questions on her test. Clare said that Adam missed more questions. Is it possible that Clare could be telling the truth?

_____

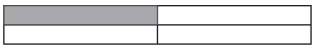
Identify halves, thirds, and fourths (including fractions greater than one), and compare fractions

Math Test

Name _____

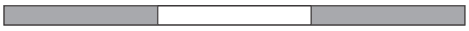
Fill in the circle next to the correct answer.

1. Which fraction represents the shaded region?



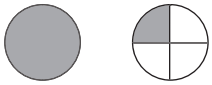
Ⓐ $\frac{1}{4}$ Ⓑ $\frac{3}{4}$ Ⓒ $\frac{1}{2}$ Ⓓ $\frac{1}{3}$

2. Which fraction represents the shaded region?



Ⓐ $\frac{1}{3}$ Ⓑ $\frac{1}{4}$ Ⓒ $\frac{2}{4}$ Ⓓ $\frac{2}{3}$

3. Which mixed number represents the shaded region?



Ⓐ $\frac{1}{4}$ Ⓑ $1\frac{1}{4}$ Ⓒ $1\frac{1}{2}$ Ⓓ 2

4. Which mixed number represents the shaded region?

Ⓐ $1\frac{1}{3}$ Ⓑ $1\frac{2}{3}$ Ⓒ $2\frac{1}{3}$ Ⓓ $2\frac{1}{2}$

5. Which of the following does NOT represent the shaded region?

Ⓐ $1\frac{2}{4}$ Ⓑ $\frac{6}{4}$ Ⓒ $1\frac{1}{2}$ Ⓓ $1\frac{1}{3}$

6. Which of the following lists fractions in order from smallest to largest?

Ⓐ $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, 1\frac{1}{2}, 1\frac{3}{4}$

Ⓑ $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}, 1\frac{1}{2}, 1\frac{3}{4}$

Ⓒ $1\frac{1}{2}, 1\frac{3}{4}, \frac{1}{2}, \frac{1}{4}, \frac{3}{4}$

Ⓓ $\frac{1}{4}, \frac{1}{2}, 1\frac{1}{2}, \frac{3}{4}, 1\frac{3}{4}$

7. Which of the following lists fractions in order from smallest to largest?

Ⓐ $\frac{1}{3}, \frac{2}{3}, 1\frac{1}{3}, 2\frac{1}{3}, 2\frac{2}{3}$

Ⓑ $\frac{1}{3}, 1\frac{1}{3}, 2\frac{1}{3}, 2\frac{2}{3}, \frac{2}{3}$

Ⓒ $\frac{1}{3}, \frac{2}{3}, 1\frac{1}{3}, 2\frac{2}{3}, 2\frac{1}{3}$

Ⓓ $\frac{1}{3}, 1\frac{1}{3}, 2\frac{1}{3}, \frac{2}{3}, 2\frac{2}{3}$

8. Which of the following is NOT correct?

Ⓐ $\frac{2}{3} < 1\frac{1}{4}$

Ⓑ $1\frac{1}{2} > 1\frac{1}{3}$

Ⓒ $2\frac{1}{2} > 2\frac{2}{3}$

Ⓓ $1\frac{3}{4} > 1\frac{1}{3}$

9. Draw a picture to show that $\frac{1}{3}$ is larger than $\frac{1}{4}$.

10. Juan and Mureta each took a test with 24 questions on it. Mureta missed $\frac{1}{4}$ of the questions, while Juan missed only 9 questions. Who got more questions correct on the test?

_____

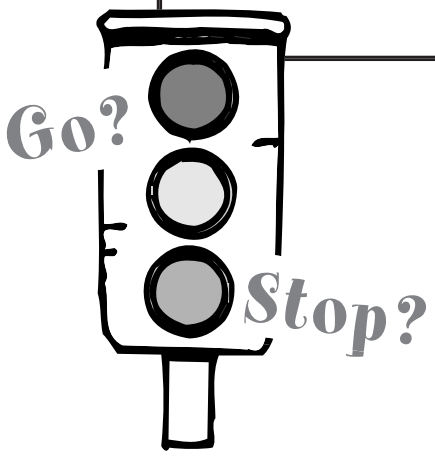
Identify halves, thirds, and fourths (including fractions greater than one), and compare fractions

Riddle

Name _____

Find the sum for each addition problem. Then write the corresponding letter at the bottom of the page on the line above the sum. The letters will spell out the answer for you.

A	$1\frac{1}{4} + \frac{2}{4} =$ _____	**M**	$2\frac{1}{8} + 2\frac{4}{8} =$ _____
E	$\frac{1}{4} + \frac{3}{4} =$ _____	**N**	$\frac{2}{7} + 1\frac{2}{7} =$ _____
G	$\frac{1}{8} + \frac{6}{8} =$ _____	**O**	$\frac{1}{9} + \frac{4}{9} =$ _____
H	$1\frac{1}{3} + 1\frac{1}{3} =$ _____	**R**	$\frac{4}{7} + 1\frac{1}{7} =$ _____
I	$\frac{2}{5} + \frac{2}{5} =$ _____	**T**	$2\frac{1}{5} + 1\frac{2}{5} =$ _____
L	$\frac{1}{7} + \frac{4}{7} =$ _____	**W**	$1\frac{2}{4} + 1\frac{1}{4} =$ _____



When should you go at red and stop at green?

_____	_____	_____	_____		_____	_____	_____	_____	_____	_____
$2\frac{3}{4}$	$2\frac{2}{3}$	$\frac{4}{4}$	$1\frac{4}{7}$		1	$1\frac{3}{4}$	$3\frac{3}{5}$	$\frac{4}{5}$	$1\frac{4}{7}$	$\frac{7}{8}$

_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
$2\frac{3}{4}$	$1\frac{3}{4}$	$3\frac{3}{5}$	$\frac{4}{4}$	$1\frac{5}{7}$	$4\frac{5}{8}$	1	$\frac{5}{7}$	$\frac{5}{9}$	$1\frac{4}{7}$

Demonstrate addition and subtraction using fractions with like denominators (including mixed numbers)

Tongue Twister

Name _____

Solve each subtraction problem. Write the letter on each line above the difference. Read the tongue twister and try to say it quickly three times.

A $\frac{5}{7} - \frac{3}{7} =$ _____	**L** $\frac{4}{7} - \frac{1}{7} =$ _____
C $\frac{5}{6} - \frac{4}{6} =$ _____	**P** $\frac{4}{9} - \frac{2}{9} =$ _____
D $\frac{7}{8} - \frac{6}{8} =$ _____	**R** $\frac{6}{7} - \frac{1}{7} =$ _____
E $\frac{3}{4} - \frac{2}{4} =$ _____	**S** $\frac{4}{5} - \frac{1}{5} =$ _____
F $\frac{8}{9} - \frac{4}{9} =$ _____	**V** $\frac{7}{8} - \frac{2}{8} =$ _____
H $\frac{2}{3} - \frac{1}{3} =$ _____	**Y** $\frac{5}{9} - \frac{4}{9} =$ _____
I $\frac{2}{5} - \frac{1}{5} =$ _____	

,

$\frac{4}{9}$	$\frac{5}{7}$	$\frac{1}{5}$	$\frac{1}{8}$	$\frac{2}{7}$	$\frac{1}{9}$	$\frac{3}{5}$		$\frac{4}{9}$	$\frac{1}{5}$	$\frac{5}{8}$	$\frac{1}{4}$
$\frac{4}{9}$	$\frac{5}{7}$	$\frac{1}{4}$	$\frac{3}{5}$	$\frac{1}{3}$		$\frac{4}{9}$	$\frac{1}{5}$	$\frac{3}{5}$	$\frac{1}{3}$		
$\frac{3}{5}$	$\frac{2}{9}$	$\frac{1}{4}$	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{2}{7}$	$\frac{3}{7}$	$\frac{3}{5}$				

Demonstrate addition and subtraction using fractions with like denominators (including mixed numbers)

Adding Fractions and Mixed Numbers

Name _____

Add the following fractions.

1. $\frac{1}{7} + \frac{5}{7} =$ _____

2. $\frac{3}{7} + \frac{3}{7} =$ _____

3. $\frac{1}{6} + \frac{4}{6} =$ _____

4. $\frac{2}{3} + \frac{1}{3} =$ _____

5. $\frac{6}{9} + \frac{1}{9} =$ _____

6. $\frac{7}{12} + \frac{4}{12} =$ _____

7. $\frac{2}{7} + \frac{4}{7} =$ _____

8. $\frac{3}{8} + \frac{4}{8} =$ _____

9. $\frac{1}{5} + \frac{2}{5} =$ _____

10. $\frac{1}{4} + \frac{2}{4} =$ _____

Add the following mixed numbers.

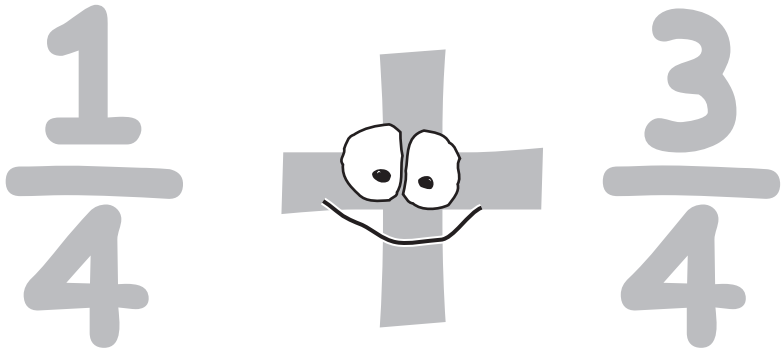
11. $1\frac{1}{5} + 2\frac{2}{5} =$ _____

12. $3\frac{1}{4} + 1\frac{2}{4} =$ _____

13. $1\frac{5}{9} + 2\frac{2}{9} =$ _____

14. $4 + 2\frac{3}{7} =$ _____

15. $8\frac{1}{9} + 4 =$ _____



Demonstrate addition and subtraction using fractions with like denominators (including mixed numbers)

Subtracting Fractions and Mixed Numbers

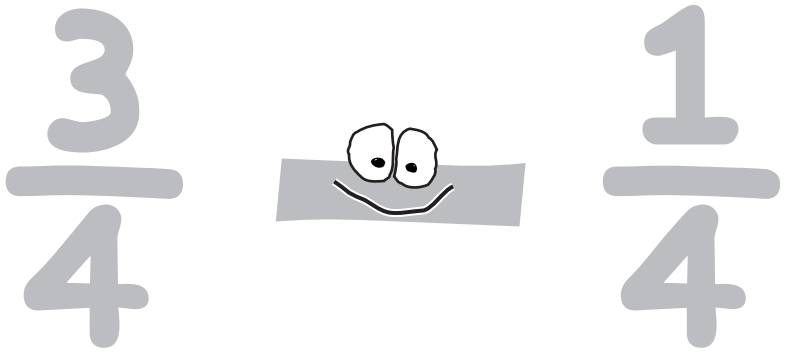
Name _____

Subtract the following fractions.

1. $\frac{5}{9} - \frac{1}{9} =$ _____
2. $\frac{6}{7} - \frac{1}{7} =$ _____
3. $\frac{3}{4} - \frac{2}{4} =$ _____
4. $\frac{8}{9} - \frac{1}{9} =$ _____
5. $\frac{4}{5} - \frac{2}{5} =$ _____
6. $\frac{6}{7} - \frac{3}{7} =$ _____
7. $\frac{7}{8} - \frac{6}{8} =$ _____
8. $\frac{5}{6} - \frac{4}{6} =$ _____
9. $\frac{9}{10} - \frac{2}{10} =$ _____
10. $\frac{8}{9} - \frac{6}{9} =$ _____

Subtract the following mixed numbers.

11. $6\frac{3}{4} - 1\frac{1}{4} =$ _____
12. $5\frac{4}{9} - 1\frac{2}{9} =$ _____
13. $6\frac{6}{7} - 2\frac{1}{7} =$ _____
14. $5\frac{4}{5} - 2\frac{1}{5} =$ _____
15. $8\frac{7}{8} - 5\frac{6}{8} =$ _____



Demonstrate addition and subtraction using fractions with like denominators (including mixed numbers)

Using Fractions and Mixed Numbers

Name _____

Solve each problem.

1. Mike brought $5\frac{3}{4}$ packages of gum to school for his birthday party. He gave away $2\frac{2}{4}$ packages during the party. How much does he have left?

_____

2. Brenda and Jodee each had $3\frac{1}{3}$ boxes of candy. How much do they have in all?

_____

3. Joe has a sister that likes to take his candy. After he got home from the store, he had $5\frac{3}{4}$ bags of candy. When he got home from school the next day, there were only $3\frac{1}{4}$ bags left. How much candy did his sister eat?

_____

4. Amanda is riding her bike to school and then back home after school. She figures that the one-way trip is $2\frac{1}{5}$ miles. How far is the round trip?

_____

5. Jason is writing a report for school that must be at least 5 pages long. He wrote $2\frac{3}{4}$ pages on Friday and then another $2\frac{2}{4}$ pages on Saturday. Is his paper long enough yet? Why or why not?

_____

_____

Demonstrate addition and subtraction using fractions with like denominators (including mixed numbers)

Math Test

Name _____

Fill in the circle next to the correct answer.

1. $\frac{1}{5} + \frac{2}{5} =$ _____

Ⓐ $\frac{2}{5}$ Ⓒ $\frac{3}{10}$

Ⓑ $\frac{3}{5}$ Ⓓ $\frac{1}{5}$

2. $5\frac{1}{7} + 2\frac{4}{7} =$ _____

Ⓐ $\frac{5}{7}$ Ⓒ $7\frac{5}{14}$

Ⓑ 7 Ⓓ $7\frac{5}{7}$

3. $\frac{8}{9} - \frac{4}{9} =$ _____

Ⓐ $\frac{4}{9}$ Ⓒ $\frac{5}{9}$

Ⓑ 4 Ⓓ $\frac{3}{9}$

4. $5\frac{7}{8} - 2\frac{6}{8} =$ _____

Ⓐ 3 Ⓒ $3\frac{1}{8}$

Ⓑ $5\frac{1}{8}$ Ⓓ 4

5. Which number sentence is correct?

Ⓐ $5\frac{1}{4} + 4\frac{2}{4} = 9\frac{3}{4}$

Ⓑ $3\frac{1}{3} + 3\frac{1}{3} = 6\frac{2}{6}$

Ⓒ $4\frac{1}{2} + 2\frac{1}{2} = 6\frac{1}{2}$

Ⓓ $8\frac{1}{7} + 1\frac{2}{7} = 8\frac{3}{7}$

6. Which number sentence is correct?

Ⓐ $7\frac{5}{9} - 4\frac{4}{9} = 3\frac{2}{9}$

Ⓑ $4\frac{3}{4} - 4\frac{2}{4} = 4\frac{1}{4}$

Ⓒ $6\frac{2}{8} - 1\frac{1}{8} = 6\frac{1}{8}$

Ⓓ $4\frac{5}{7} - 2\frac{3}{7} = 2\frac{2}{7}$

7. Which number sentence is NOT correct?

Ⓐ $7\frac{1}{5} + 2\frac{2}{5} = 9\frac{3}{5}$

Ⓑ $2\frac{1}{9} + 4\frac{3}{9} = 6\frac{4}{9}$

Ⓒ $8\frac{2}{5} + 4\frac{1}{5} = 8\frac{3}{5}$

Ⓓ $3 + 4\frac{1}{4} = 7\frac{1}{4}$

8. Which number sentence is NOT correct?

Ⓐ $3\frac{7}{9} - 1\frac{6}{9} = 2\frac{1}{9}$

Ⓑ $4\frac{5}{8} - 2\frac{4}{8} = 2\frac{1}{8}$

Ⓒ $4\frac{4}{5} - 1\frac{2}{5} = 3\frac{2}{5}$

Ⓓ $6\frac{5}{7} - 3\frac{2}{7} = 3\frac{2}{7}$

9. Brandon has 5 pages to write for a school report. If he has written $2\frac{1}{4}$ pages, how many more does he have to write?

_____

10. Aja brought $2\frac{1}{4}$ packages of cards to school. Miranda gave her another $2\frac{3}{4}$ packages. How many packages does she have now?

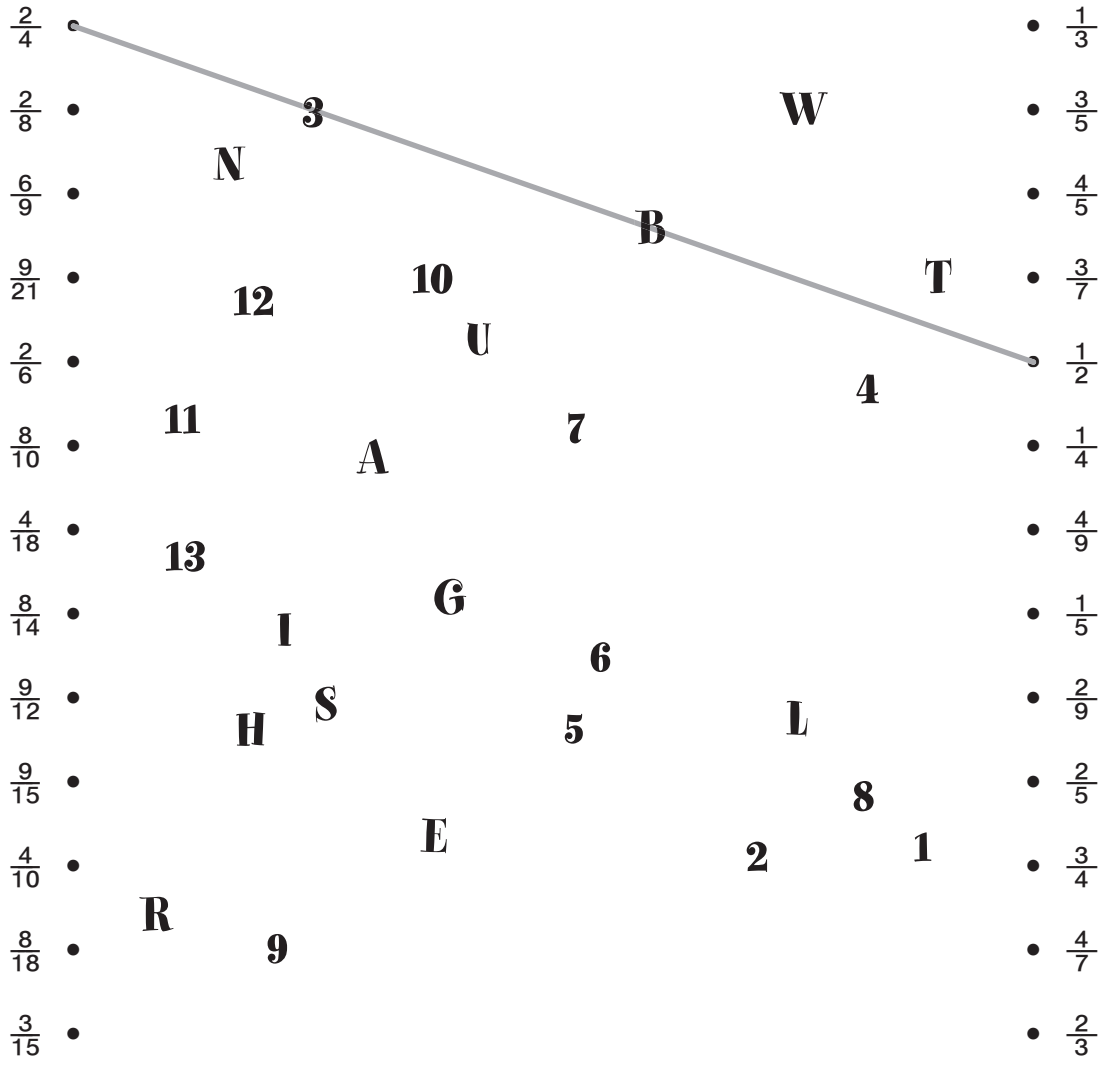
_____

Demonstrate addition and subtraction using fractions with like denominators (including mixed numbers)

Riddle

Name _____

To solve the riddle, draw a straight line between each fraction on the left and an equivalent fraction on the right. Each line will go through one number and one letter. At the bottom of the page, write the letter on each line above the number.



What did Mrs. Margarine think about her sister's husband?

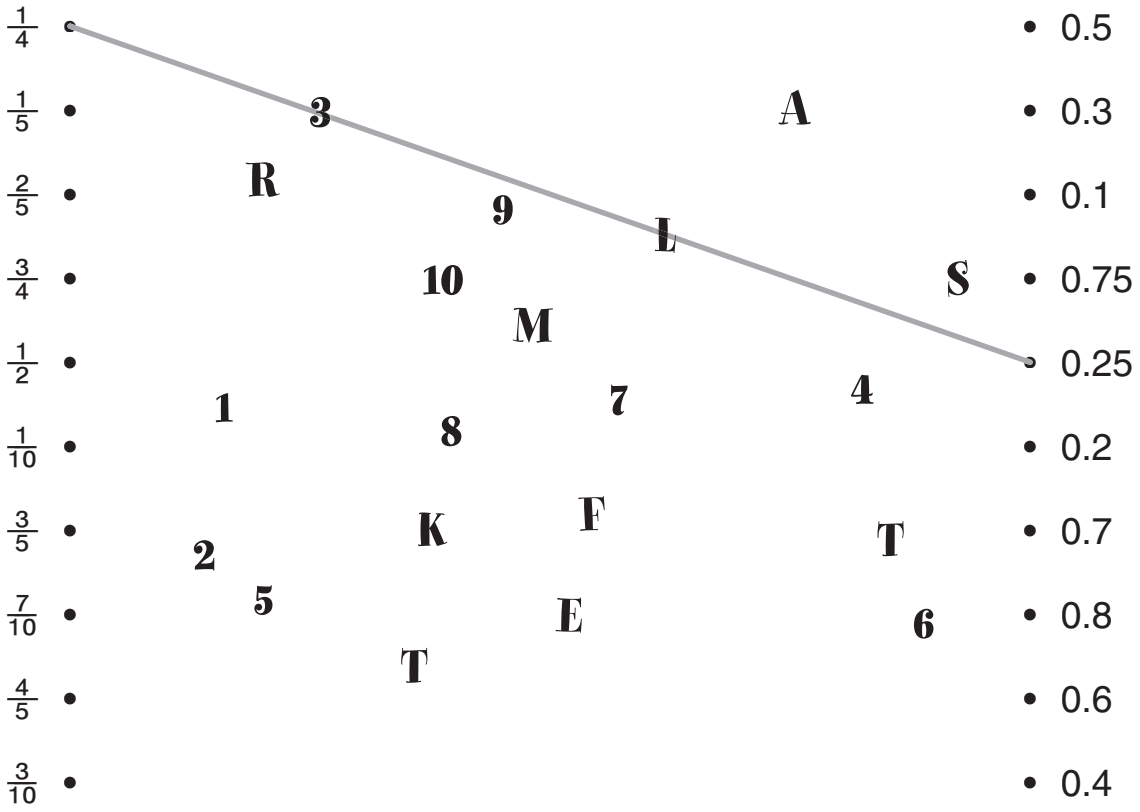
1	8		7	2		6		13	5	8	6	10		
B						-			-					
3	11	10	10	8	5		7	4		9	6	12		

Determine common equivalent fractions and decimals (fractions equivalent to other fractions and fractions equivalent to decimals)

Where Do Dogs Refuse to Shop?

Name _____

To solve the riddle, draw a straight line between each fraction on the left and an equivalent fraction on the right. Each line will go through one number and one letter. At the bottom of the page, write the letter on each line above the number.



				L		
9	6		8	3	2	9
1	9	4	7	2	5	10

Determine common equivalent fractions and decimals (fractions equivalent to other fractions and fractions equivalent to decimals)

Equivalent Fractions

Name _____

Write two fractions that are equivalent to each of the following fractions.

1. $\frac{1}{2}$ _____
2. $\frac{1}{3}$ _____
3. $\frac{1}{5}$ _____
4. $\frac{2}{3}$ _____
5. $\frac{4}{5}$ _____
6. $\frac{3}{7}$ _____
7. $\frac{1}{4}$ _____
8. $\frac{1}{7}$ _____
9. $\frac{3}{4}$ _____
10. $\frac{2}{5}$ _____

Reduce the following fractions to lowest terms.

11. $\frac{2}{4}$ _____
12. $\frac{3}{9}$ _____
13. $\frac{2}{6}$ _____
14. $\frac{4}{12}$ _____
15. $\frac{12}{16}$ _____
16. $\frac{10}{15}$ _____
17. $\frac{8}{12}$ _____
18. $\frac{9}{21}$ _____
19. $\frac{15}{20}$ _____
20. $\frac{5}{15}$ _____

$\frac{1}{4}$ 0.25 $\frac{2}{8}$

Determine common equivalent fractions and decimals (fractions equivalent to other fractions and fractions equivalent to decimals)

Make a Match

Name _____

Match each fraction on the left to the equivalent decimal on the right.

1.	$\frac{1}{2}$	**A**	0.4
2.	$\frac{1}{4}$	**B**	0.6
3.	$\frac{1}{5}$	**C**	0.8
4.	$\frac{2}{5}$	**D**	0.5
5.	$\frac{3}{10}$	**E**	0.3
6.	$\frac{4}{5}$	**F**	0.75
7.	$\frac{3}{4}$	**G**	0.25
8.	$\frac{3}{5}$	**H**	0.2

Determine common equivalent fractions and decimals (fractions equivalent to other fractions and fractions equivalent to decimals)

Using Fractions and Decimals

Name _____

Solve each problem.

1. Holly was shopping at Clothing World and found two sales, but she didn't know which was a better buy. The first sale was $\frac{1}{4}$ off the original price and the second sale was 0.3 off the original price. Which was a larger discount?

_____

2. Lori is making cookies and the recipe calls for 0.25 cups of milk. All she has are measuring cups that are marked in fractions. What amount of milk (in fraction form) does she need to put into the recipe?

_____

3. What is one way to remember that one-fourth ($\frac{1}{4}$) is the same as 0.25? Next, explain how $\frac{1}{2}$ is the same as 0.5.

_____

_____

4. Gen is making a quilt and needs to measure out 0.25 feet. What fraction of a foot is that, and how many inches is that equivalent to?

_____

Determine common equivalent fractions and decimals (fractions equivalent to other fractions and fractions equivalent to decimals)

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Which fraction is equivalent to $\frac{3}{6}$?

Ⓐ $\frac{2}{3}$ Ⓒ $\frac{1}{4}$

Ⓑ $\frac{1}{3}$ Ⓓ $\frac{1}{2}$

2. Which fraction is equivalent to $\frac{4}{12}$?

Ⓐ $\frac{1}{2}$ Ⓒ $\frac{1}{4}$

Ⓑ $\frac{1}{3}$ Ⓓ $\frac{1}{12}$

3. Which fraction is NOT equivalent to $\frac{1}{3}$?

Ⓐ $\frac{2}{6}$ Ⓒ $\frac{5}{15}$

Ⓑ $\frac{4}{12}$ Ⓓ $\frac{3}{6}$

4. Which fraction is NOT equivalent to $\frac{1}{2}$?

Ⓐ $\frac{5}{10}$ Ⓒ $\frac{4}{8}$

Ⓑ $\frac{2}{5}$ Ⓓ $\frac{3}{6}$

5. Which decimal is equivalent to $\frac{1}{4}$?

Ⓐ 0.2 Ⓒ 0.5

Ⓑ 0.4 Ⓓ 0.25

6. Which decimal is equivalent to $\frac{2}{5}$?

Ⓐ 0.25 Ⓒ 0.4

Ⓑ 0.2 Ⓓ 0.5

7. Which fraction is NOT equivalent to 0.5?

Ⓐ $\frac{1}{2}$ Ⓒ $\frac{3}{6}$

Ⓑ $\frac{5}{8}$ Ⓓ $\frac{6}{12}$

8. Which fraction is NOT equivalent to 0.2?

Ⓐ $\frac{1}{5}$ Ⓒ $\frac{4}{20}$

Ⓑ $\frac{2}{10}$ Ⓓ $\frac{2}{5}$

9. List four fractions equivalent to 0.5.

_____

_____

10. Explain how $\frac{1}{4}$ is the same as 0.25.

_____

_____

_____

Determine common equivalent fractions and decimals (fractions equivalent to other fractions and fractions equivalent to decimals)

What Goes Tick-Tick, Woof-Woof?

Name _____

Solve each addition problem. Then write the letter on each line above the answer. The letters will spell out the answer for you.

A	0.5 + 0.3 =	_____
A	0.4 + 0.2 =	_____
C	0.25 + 0.52 =	_____
D	4.0 + 0.2 =	_____
G	0.5 + 3.0 =	_____
H	2.5 + 5.2 =	_____
O	2.5 + 0.52 =	_____
T	0.25 + 5.2 =	_____
W	0.52 + 0.71 =	_____

_____		_____	_____	_____	_____	_____	_____	_____	_____
0.6		1.23	0.8	5.45	0.77	7.7	4.2	3.02	3.5

Demonstrate addition and subtraction with decimals to the hundredths

Tongue Twister

Name _____

Solve each subtraction problem below. Then write the letter on each line above the difference. Read the tongue twister and try to say it quickly three times.

A	2.5 – 1.2 = _____	**N**	6.54 – 6.3 = _____
C	5.3 – 2.1 = _____	**O**	6.25 – 4.5 = _____
D	4.6 – 1.3 = _____	**S**	5.2 – 3.14 = _____
E	9.5 – 8.4 = _____	**T**	8.69 – 1.26 = _____
H	5.2 – 4.8 = _____	**V**	6.49 – 5.2 = _____
I	4.12 – 3.09 = _____	**W**	6.2 – 4.16 = _____
K	5.26 – 4.13 = _____	**Y**	5.5 – 1.26 = _____
L	6.24 – 2.59 = _____		

2.06	1.1	1.29	1.1	0.24		2.06	1.03	3.65	3.65	4.24
2.06	1.3	0.24	7.43	1.3	2.06		2.06	3.65	1.03	3.3
1.75	0.24		7.43	0.4	1.1					
2.06	3.65	1.03	3.2	1.13		2.06	0.24	1.75	2.04	

Demonstrate addition and subtraction with decimals to the hundredths

Adding Decimals

Name _____

Find the following sums.

1. 1.2 + 2.6 = _____
2. 5.3 + 6.4 = _____
3. 2.8 + 6.1 = _____
4. 2.5 + 6.4 = _____
5. 6.0 + 2.6 = _____
6. 4.0 + 8.2 = _____
7. 6.1 + 9.0 = _____
8. 5.2 + 8.0 = _____
9. 2.63 + 1.64 = _____
10. 2.94 + 8.16 = _____
11. 8.64 + 6.15 = _____
12. 6.28 + 8.64 = _____
13. 6.5 + 5.29 = _____
14. 7.41 + 8.9 = _____
15. 8.2 + 8.46 = _____
16. 5.29 + 8.1 = _____
17. 8.2 + 0.64 = _____
18. 4.46 + 8.29 = _____
19. 5.5 + 9.47 = _____
20. 8.2 + 49.64 = _____

Demonstrate addition and subtraction with decimals to the hundredths

Subtracting Decimals

Name _____

Find the following differences.

1. 5.2 – 4.1 = _____
2. 9.4 – 6.2 = _____
3. 8.4 – 5.1 = _____
4. 8.7 – 6.4 = _____
5. 9.46 – 8.41 = _____
6. 7.95 – 4.16 = _____
7. 8.26 – 4.19 = _____
8. 8.94 – 4.0 = _____
9. 9.5 – 7.2 = _____
10. 4.5 – 3.09 = _____
11. 8.5 – 4.62 = _____
12. 4.8 – 1.29 = _____
13. 5.49 – 2.4 = _____
14. 8.49 – 6.82 = _____
15. 8.5 – 6.18 = _____
16. 49.5 – 6.4 = _____
17. 84.42 – 64.15 = _____
18. 94.62 – 49.98 = _____
19. 49.52 – 48.98 = _____
20. 6.19 – 5.2 = _____

Demonstrate addition and subtraction with decimals to the hundredths

Using Decimals

Name _____

Solve each problem.

1. Julie had $6.25 before she went to the candy store. She bought $3.89 worth of candy at the store. How much money does she have left?

_____

2. Chad was helping his dad build a shed. They measured a board that was 2.6 meters long. They need to cut it to measure 2.35 meters long. How much should they cut off?

_____

3. Darla baked a three-layer cake with her father. Each of the layers was 5.3 centimeters high. If they put 0.8 centimeters of frosting between each layer and then on the top of the cake, how tall was the entire three-layer cake?

_____

4. Peggy and Michelle are planting a garden. They figure that each row must be about 0.8 feet across with 0.5 feet space between each row. If they are planting 5 rows in their garden, what is the total width of the garden (distance from the beginning of the first row to the far side of the last row)?

_____

5. Paula and her brother were making a ramp to ride their bikes on. She put two boards with lengths of 2.6 feet and 1.5 yards together end to end. After putting these boards together, she decided that it was a little too long, so she cut off 1.8 feet. What was the final length of the ramp?

_____

Demonstrate addition and subtraction with decimals to the hundredths

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 4.3 + 2.7 = _____

Ⓐ 7.0
Ⓑ 7.10
Ⓒ 6.11
Ⓓ 6.10

2. 6.2 + 0.92 = _____

Ⓐ 15.4
Ⓑ 6.94
Ⓒ 6.12
Ⓓ 7.12

3. 5.9 – 3.6 = _____

Ⓐ 1.3
Ⓑ 2.3
Ⓒ 2.4
Ⓓ 3.2

4. 6.3 – 4.8 = _____

Ⓐ 1.5
Ⓑ 2.5
Ⓒ 2.8
Ⓓ 2.3

5. Which of the following equals 2.9?

Ⓐ 1.3 + 1.5
Ⓑ 2.1 + 0.7
Ⓒ 7.1 – 4.2
Ⓓ 8.4 – 5.6

6. Which of the following does NOT equal 5.2?

Ⓐ 3.1 + 2.1
Ⓑ 4.8 + 0.4
Ⓒ 9.6 – 4.4
Ⓓ 8.9 – 3.6

7. Which of the following equals 12.08?

Ⓐ 16.8 – 4.72
Ⓑ 18.8 – 6.0
Ⓒ 15.08 – 4.2
Ⓓ 19.26 – 7.16

8. Which of the following does NOT equal 15.84?

Ⓐ 6.23 + 9.59
Ⓑ 8.19 + 7.65
Ⓒ 5.47 + 10.37
Ⓓ 9.94 + 5.9

9. Raymond has two boards with lengths of 2.6 feet and 4.8 feet. If he glues them end to end, what will be the total length of the new board?

_____

10. Angel is cutting some fabric to sew a new skirt. She bought 5.5 yards of the fabric. She needs 2.8 yards for the skirt. What length of fabric will be left over?

_____

Demonstrate addition and subtraction with decimals to the hundredths

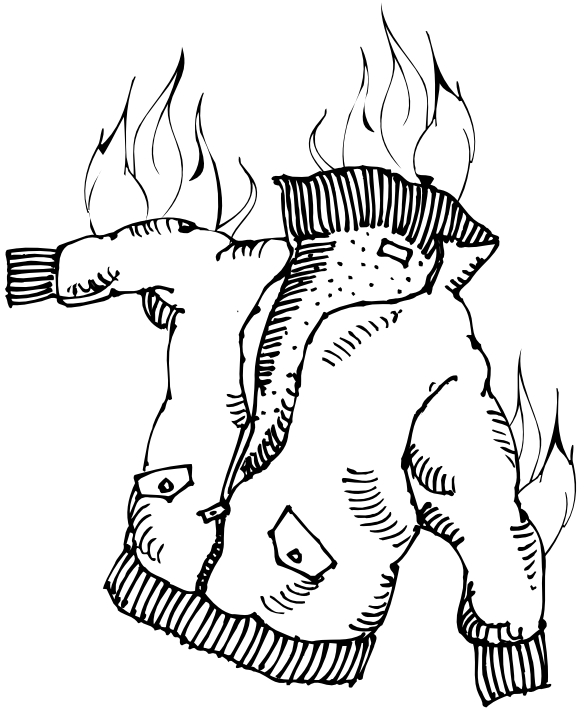
What Do You Call a Burning Jacket?

Name _____

To solve the riddle, draw a straight line between each math sentence on the left and the correct symbol on the right. Each line will go through one number and one letter. Write the letter on the line above the number to spell out the answer to the riddle.

4.3 ___<___ 7.0	6 E	<
5.2 _____ 5.1	A	
4.9 _____ 5.1	1 B	
4.2 _____ 4.20	5 Z	=
3.68 _____ 3.71	R 2	
8.53 _____ 8.49	L 7 A 4	>
4.0 _____ 4.0	3	

1	2	3	4	5	6	7
					E	

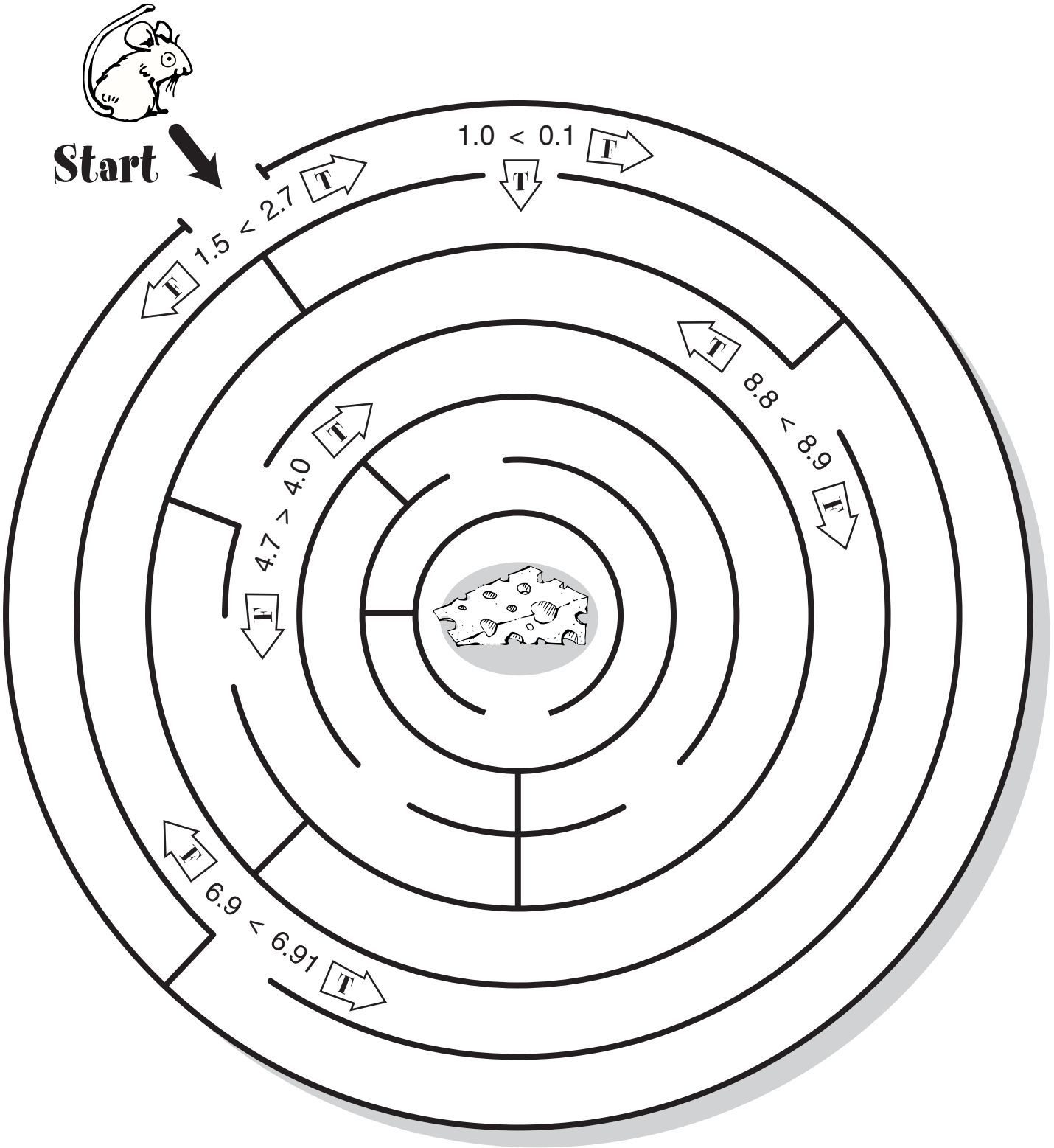


Compare sets and values using <, >, and =

Through the Maze

Name _____

Help the mouse find its way through the maze. Decide if each number sentence is true (T) or false (F). Draw a path through the maze to the cheese.



Compare sets and values using <, >, and =

Use Symbols

Name _____

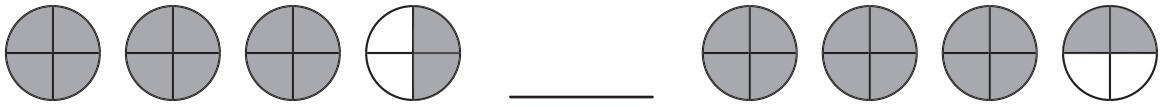
Write **<**, **>**, or **=** in each blank to compare the shaded regions.

1.  _____

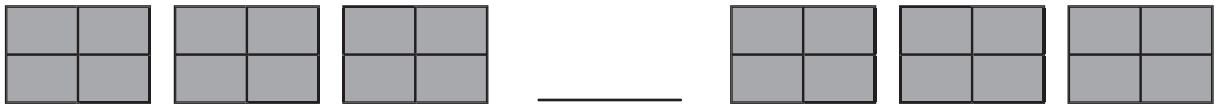
2.  _____

3.  _____

4.  _____

5.  _____

6.  _____

7.  _____

8.  _____

9.  _____

10.  _____

Compare sets and values using <, >, and =

Greater Than, Less Than, or Equal

Name _____

Write **<**, **>**, or **=** in the blank to complete each number sentence.

1. 3.0 _____ 5

2. 8.0 _____ 4

3. 3 _____ 3.0

4. 2.1 _____ 3

5. 4.1 _____ 4.10

6. 5.9 _____ 2.4

7. 49 ___ 4.9

8. 100 _____ 100.3

9. 8.9 _____ 89

10. 35.0 _____ 35

11. 18 _____ 17.1

12. 2.45 _____ 2.61

13. 4.2 _____ 5.08

14. 18.40 _____ 18.4

15. 294 _____ 2.94

16. 3.2 _____ 4.2

17. 8.4 _____ 21.0

18. 94.3 _____ 93.9

19. 16 _____ 15.9

20. 3.69 _____ 3.71

Compare sets and values using <, >, and =

Making Comparisons

Name _____

Solve each problem.

1. Tim and Julie are arguing about who has the longer piece of string. Tim's string is 3.5 feet long, while Julie's string is 3.4 feet long. Who has the longer piece of string?

_____

2. Amy has two layers of cake that have diameters of 18.5 centimeters and 24 centimeters. If she wants to put the larger cake on the bottom, which diameter cake should she use?

_____

3. Students in Mrs. Vierow's class were given the following math sentence and asked to complete it with a <, >, or = symbol: 4.5 _____ 4.50. Gerardo thinks that it should be a < since 45 is less than 450. Do you agree with him? If not, write a note explaining your reasoning.

_____

_____

4. Konna and Eva were arguing about the following problem: 3.60 < 3.72. Konna said that it is correct since 6 tenths is smaller than 7 tenths. Eva said that 60 hundredths is smaller than 72 hundredths. Which student has the correct reasoning for the answer?

_____

5. Brandon says that 5.19 is more than 5.2. He claims that both have 5s for the whole numbers, but 19 is more than 2, so 5.19 is more than 5.2. Do you agree with Brandon? If not, write a note explaining your reasoning.

_____

_____

Compare sets and values using <, >, and =

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 5.2 _____ 4.9

Ⓐ <
Ⓑ >
Ⓒ =
Ⓓ none of the above

2. 3.6 _____ 4.2

Ⓐ <
Ⓑ >
Ⓒ =
Ⓓ none of the above

3. 2.61 _____ 3.1

Ⓐ <
Ⓑ >
Ⓒ =
Ⓓ none of the above

4. 4.93 _____ 4.96

Ⓐ <
Ⓑ >
Ⓒ =
Ⓓ none of the above

5. 8.1 _____ 8.10

Ⓐ <
Ⓑ >
Ⓒ =
Ⓓ none of the above

6. 7.84 _____ 7.8

Ⓐ <
Ⓑ >
Ⓒ =
Ⓓ none of the above

7. Which of the following is correct?

Ⓐ 5.9 > 5.91
Ⓑ 6.9 < 6.89
Ⓒ 7.30 = 7.03
Ⓓ 8.2 = 8.20

8. Which of the following is NOT correct?

Ⓐ 4.5 < 4.51
Ⓑ 5.03 = 5.30
Ⓒ 3.5 = 3.50
Ⓓ 6.38 > 6.35

9. Juan collected two ropes. One rope measured 4.2 feet, while the other measured 5.9 feet. Which rope is the longer rope?

_____

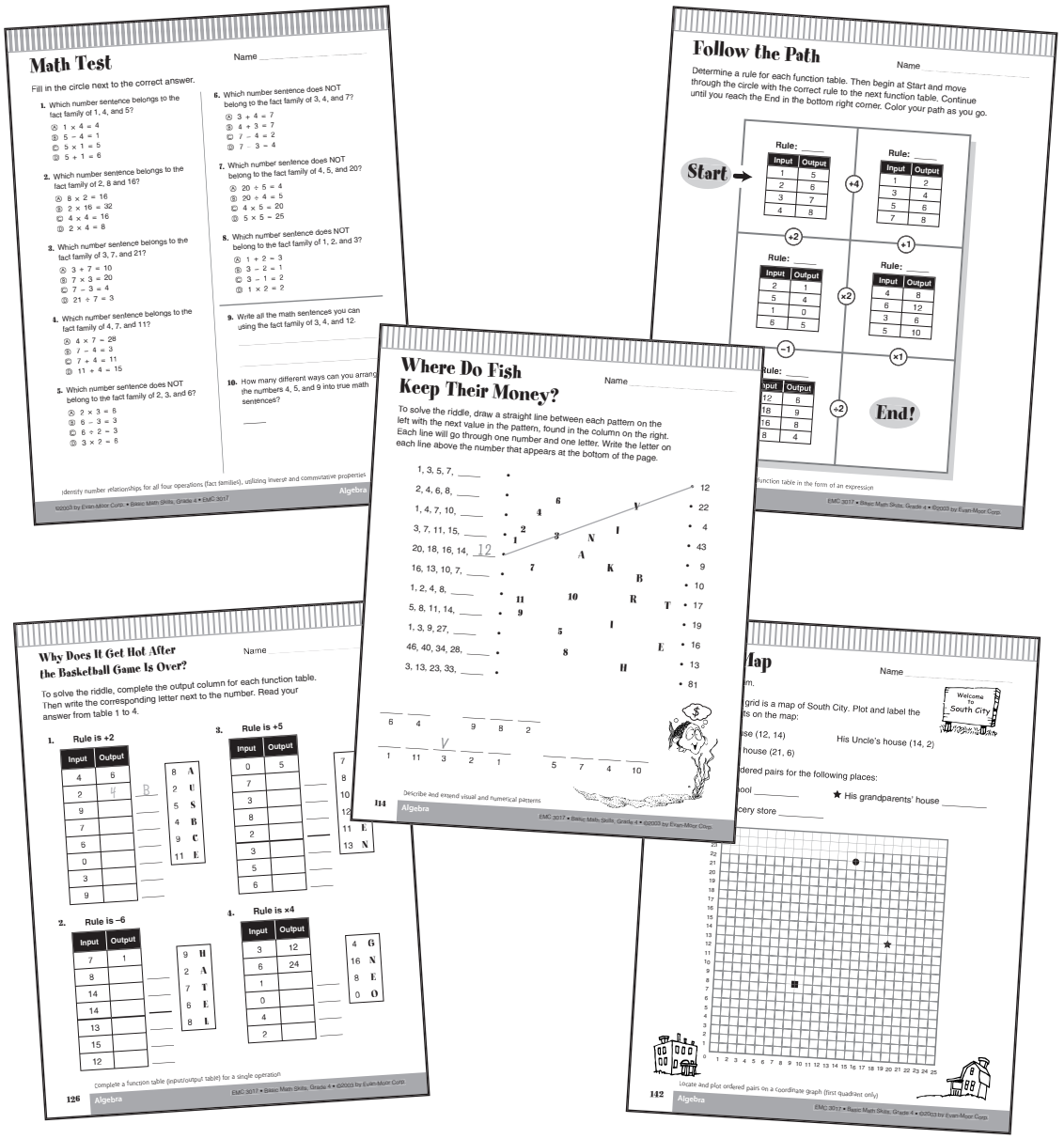
10. Ivan and Roberto attempted to complete the math sentence 4.5 _____ 4.50 by using a < symbol. Their reasoning was that the 4s are the same for the whole numbers. They thought that since 5 is less than 50, that the 4.5 must be less than the 4.50. Do you agree? If not, write a note explaining your reasoning.

_____

_____

_____

Algebra



Where Do Fish Keep Their Money?

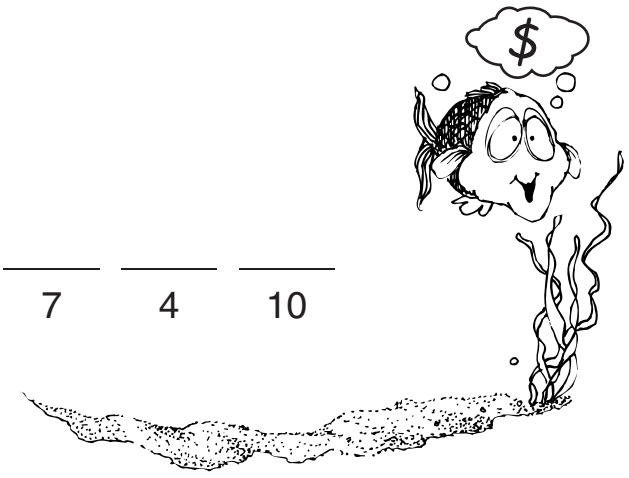
Name _____

To solve the riddle, draw a straight line between each pattern on the left with the next value in the pattern, found in the column on the right. Each line will go through one number and one letter. Write the letter on each line above the number that appears at the bottom of the page.

1, 3, 5, 7, _____	12
2, 4, 6, 8, _____	22
1, 4, 7, 10, _____	4
3, 7, 11, 15, _____	43
20, 18, 16, 14, 12	9
16, 13, 10, 7, _____	10
1, 2, 4, 8, _____	17
5, 8, 11, 14, _____	19
1, 3, 9, 27, _____	16
46, 40, 34, 28, _____	13
3, 13, 23, 33, _____	81

6 4 9 8 2

1 11 V 3 2 1 5 7 4 10



Describe and extend visual and numerical patterns

Tongue Twister

Name _____

Find the next figure in each pattern below. Then write the corresponding letter on each line above the correct figure. Read the tongue twister and try to say it quickly three times.

G  _____

P  _____

P  _____

P  _____

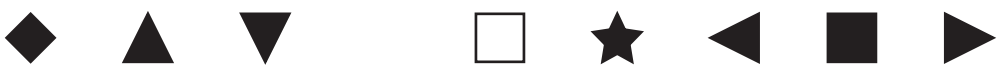
P  _____

U  _____

U  _____

Y  _____

_____ _____ _____ _____ _____ _____ _____ _____ _____



Describe and extend visual and numerical patterns

What's the Rule?

Name _____

List the next three numbers in each pattern. Then write the rule you used to find those numbers.

1. 1, 3, 5, 7, 9, 11, 13, 15 — **Rule** +2

2. 3, 7, 11, 15, _____, _____, _____ — **Rule** _____

3. 5, 11, 17, 23, _____, _____, _____ — **Rule** _____

4. 1, 2, 4, 8, _____, _____, _____ — **Rule** _____

5. 28, 25, 22, 19, _____, _____, _____ — **Rule** _____

6. 59, 53, 47, 41, _____, _____, _____ — **Rule** _____

7. 1, 2, 4, 7, 11, 16, _____, _____, _____ — **Rule** _____

8. 94, 89, 84, 79, _____, _____, _____ — **Rule** _____

9. 52, 60, 68, 76, _____, _____, _____ — **Rule** _____

10. 2, 4, 7, 9, 12, 14, _____, _____, _____ — **Rule** _____

Describe and extend visual and numerical patterns

Describe the Patterns

Name _____

Draw the next figure in each pattern. Then write a sentence describing each pattern.

1.  _____

   Rule _____

2.  _____

   Rule _____

3.  _____

   Rule _____

4.  _____

   Rule _____

5.  _____

   Rule _____

6.  _____

   Rule _____

7.  _____

   Rule _____

8.  _____

   Rule _____

Describe and extend visual and numerical patterns

Using Patterns

Name _____

Solve each problem.

1. Sarah is making a quilt with her mother. She would like to use a pattern of triangles facing different directions around the border of the quilt. Draw a pattern using triangles that could repeat all the way around the quilt.

2. Adam is making a brick fence with his dad around their front yard. He has started the top border of the fence with the following pattern of bricks, showing some bricks lengthwise and some showing the end of the brick.

How should Adam place the next brick on the right side to continue the pattern?

_____

3. Tim has identified his pattern as having the format A, B, B, A, B, B, and so on. If the first item in his pattern is red followed by blue, what is the color of the next two items in his pattern?

_____

4. Joan is writing a song that is in a pattern. The first thing she sings is the chorus. The next part is the first verse of her song. This is followed by a repeat of the chorus. Then she sings the second verse. If her pattern continues, what will she sing next?

_____

5. Using red and blue crayons, as well as squares and circles, create a pattern using both attributes.

Describe and extend visual and numerical patterns

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 2, 4, 6, 8, _____

Ⓐ 9 Ⓒ 11
Ⓑ 10 Ⓓ 12

2. 4, 7, 10, 13, _____

Ⓐ 13 Ⓒ 15
Ⓑ 14 Ⓓ 16

3. 65, 59, 53, 47, _____

Ⓐ 43 Ⓒ 42
Ⓑ 41 Ⓓ 40

4. 1, 2, 4, 8, _____

Ⓐ 24 Ⓒ 10
Ⓑ 16 Ⓓ 12

5. 35, 31, 27, 23, _____

Ⓐ 21 Ⓒ 24
Ⓑ 19 Ⓓ 20

6. 14, 19, 24, 29, _____

Ⓐ 34 Ⓒ 35
Ⓑ 39 Ⓓ 24

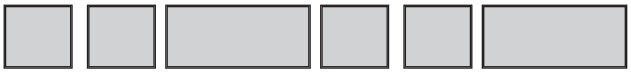
7. ▲▶▼◀▲▶ _____

Ⓐ ▲
Ⓑ ▶
Ⓒ ▼
Ⓓ ◀

8. □■●○□ _____

Ⓐ □
Ⓑ ■
Ⓒ ●
Ⓓ ○

9. Julie is making a brick fence with her dad around their front yard. She started the top border of the fence with the following pattern of bricks:



Describe the pattern and explain what should come next.

_____

_____

_____

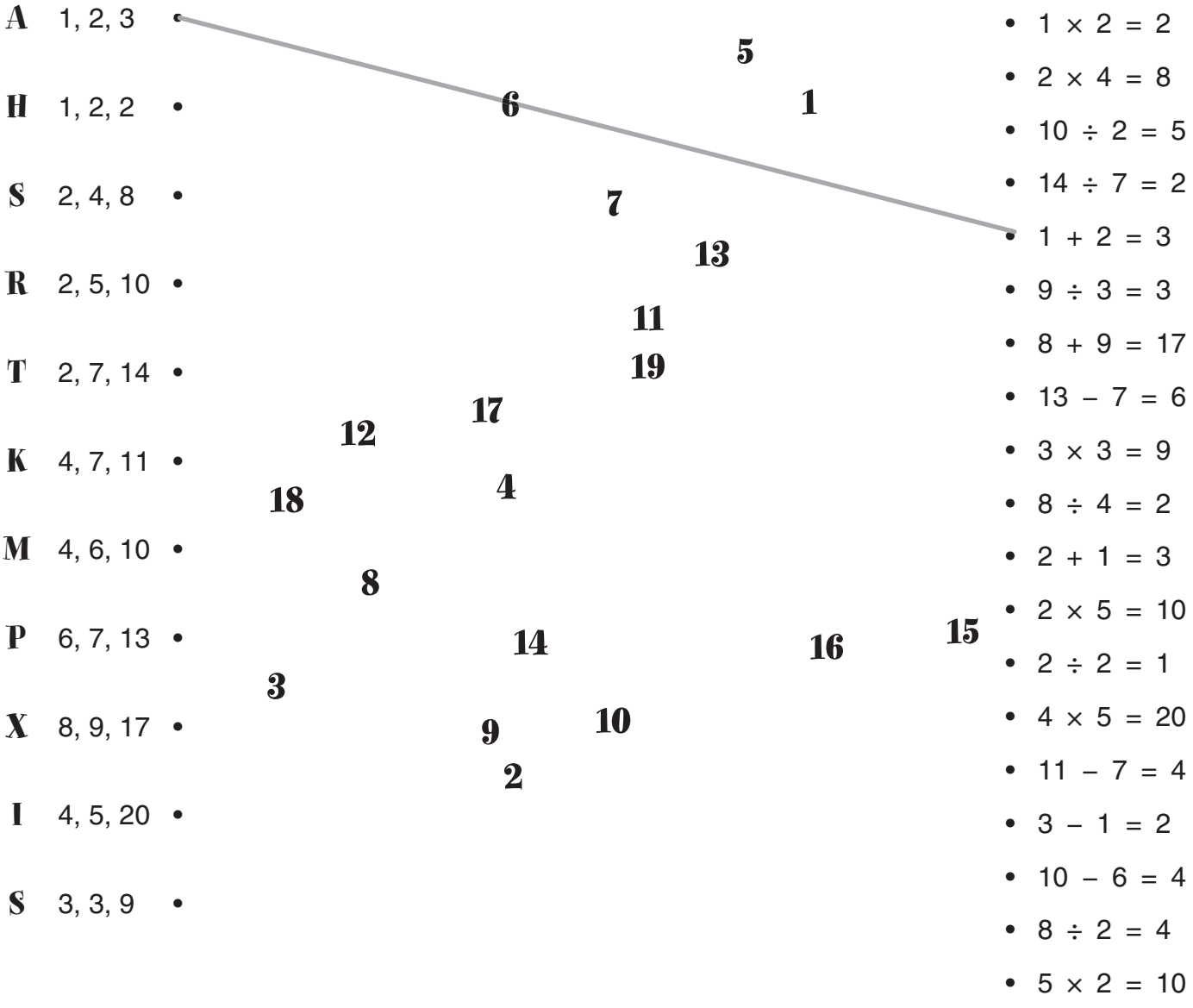
10. Use red and orange crayons to create a pattern using two attributes (color and shape). Draw the pattern using squares and triangles in the two colors.

Describe and extend visual and numerical patterns

Tongue Twister

Name _____

Using fact families, draw straight lines from the numbers on the left to all the math sentences on the right that belong to that number family. Each line will pass through one number. On that numbered space at the bottom of the page, write the letter. Read the tongue twister and try to say it quickly three times.



1	2	3		4	5	6	7	8				
9	10	11	12	13		14	15	16	17	18	19	

Identify number relationships for all four operations (fact families), utilizing inverse and commutative properties

How Do You Stop a Skunk From Smelling?

Name _____

Identify which number family each number sentence belongs to. Write the letter for the number family next to each number sentence. Read the answer to the riddle from top to bottom.

_____ 25 ÷ 5 = 5

_____ 6 – 4 = 2

_____ 2 × 6 = 12

_____ 3 + 5 = 8

_____ 4 + 2 = 6

_____ 18 ÷ 3 = 6

_____ 1 × 2 = 2

_____ 8 ÷ 4 = 2

_____ 11 – 7 = 4

_____ 6 + 3 = 9

_____ 5 × 2 = 10

_____ 2 + 4 = 6

_____ 9 – 3 = 6

_____ 5 – 3 = 2

D	1, 2, 2	**N**	2, 5, 10
E	2, 3, 5	**O**	2, 4, 6
H	3, 5, 8	**S**	3, 6, 9
I	2, 4, 8	**T**	4, 7, 11
L	3, 6, 18	**U**	2, 6, 12
M	1, 5, 5	**Y**	5, 5, 25

Identify number relationships for all four operations (fact families), utilizing inverse and commutative properties

Inverse Operations

Name _____

Answer each question.

1. What is the inverse operation for addition?

_____

2. What is the inverse operation for multiplication?

_____

3. Using the numbers 3, 6, and 9, write four correct number sentences.

_____

_____

4. Using the numbers 1, 3, and 3, write four correct number sentences.

_____

_____

5. Using the numbers 5, 5, and 25, write two correct number sentences.

_____

6. Using the numbers 5, 6, and 11, write four correct number sentences.

_____

_____

7. Looking at number 5 above, why can you write only two unique number sentences?

_____

Identify number relationships for all four operations (fact families), utilizing inverse and commutative properties

Families

Name _____

Answer each question.

1. What is the inverse operation for subtraction?

_____

2. What is the inverse operation for division?

_____

Use the fact families and the inverse operations to write at least two other number sentences that are related to each of the following sentences.

3. 3 + 4 = 7 _____

4. 5 × 2 = 10 _____

5. 6 ÷ 3 = 2 _____

6. 8 – 2 = 6 _____

7. 7 + 8 = 15 _____

8. 12 ÷ 3 = 4 _____

9. 3 × 6 = 18 _____

10. 17 – 9 = 8 _____

Identify number relationships for all four operations (fact families), utilizing inverse and commutative properties

Arrange the Numbers

Name _____

1. How many different ways can you arrange the numbers 5, 6, and 30 into true math sentences? _____	
2. How many different ways can you arrange the numbers 3, 4, and 7 into true math sentences? _____	
3. How many different ways can you arrange the numbers 4, 4, and 8 into true math sentences? _____	
4. How many different ways can you arrange the numbers 3, 3, and 9 into true math sentences? _____	

5. Why can't you arrange any set of numbers into four unique math sentences?

_____

_____

Identify number relationships for all four operations (fact families), utilizing inverse and commutative properties

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Which number sentence belongs to the fact family of 1, 4, and 5?

Ⓐ 1 × 4 = 4
Ⓑ 5 – 4 = 1
Ⓒ 5 × 1 = 5
Ⓓ 5 + 1 = 6

2. Which number sentence belongs to the fact family of 2, 8, and 16?

Ⓐ 8 × 2 = 16
Ⓑ 2 × 16 = 32
Ⓒ 4 × 4 = 16
Ⓓ 2 × 4 = 8

3. Which number sentence belongs to the fact family of 3, 7, and 21?

Ⓐ 3 + 7 = 10
Ⓑ 7 × 3 = 20
Ⓒ 7 – 3 = 4
Ⓓ 21 ÷ 7 = 3

4. Which number sentence belongs to the fact family of 4, 7, and 11?

Ⓐ 4 × 7 = 28
Ⓑ 7 – 4 = 3
Ⓒ 7 + 4 = 11
Ⓓ 11 + 4 = 15

5. Which number sentence does NOT belong to the fact family of 2, 3, and 6?

Ⓐ 2 × 3 = 6
Ⓑ 6 – 3 = 3
Ⓒ 6 ÷ 2 = 3
Ⓓ 3 × 2 = 6

6. Which number sentence does NOT belong to the fact family of 3, 4, and 7?

Ⓐ 3 + 4 = 7
Ⓑ 4 + 3 = 7
Ⓒ 7 – 4 = 2
Ⓓ 7 – 3 = 4

7. Which number sentence does NOT belong to the fact family of 4, 5, and 20?

Ⓐ 20 ÷ 5 = 4
Ⓑ 20 ÷ 4 = 5
Ⓒ 4 × 5 = 20
Ⓓ 5 × 5 = 25

8. Which number sentence does NOT belong to the fact family of 1, 2, and 3?

Ⓐ 1 + 2 = 3
Ⓑ 3 – 2 = 1
Ⓒ 3 – 1 = 2
Ⓓ 1 × 2 = 2

9. Write all the math sentences you can using the fact family of 3, 4, and 12.

_____

_____

10. How many different ways can you arrange the numbers 4, 5, and 9 into true math sentences?

_____

Identify number relationships for all four operations (fact families), utilizing inverse and commutative properties

Why Does It Get Hot After the Basketball Game Is Over?

Name _____

To solve the riddle, complete the output column for each function table. Then write the corresponding letter next to the number. Read your answer from table 1 to 4.

1. Rule is +2

Input	Output	
4	6	
2	4	B
9		
7		
6		
0		
3		
9		

8	A
2	U
5	S
4	B
9	C
11	E

2. Rule is –6

Input	Output	
7	1	
8		
14		
14		
13		
15		
12		

9	H
2	A
7	T
6	E
8	L

3. Rule is +5

Input	Output	
0	5	
7		
3		
8		
2		
3		
5		
6		

7	S
8	A
10	R
12	F
11	E
13	N

4. Rule is ×4

Input	Output	
3	12	
6	24	
1		
0		
4		
2		

4	G
16	N
8	E
0	O

Complete a function table (input/output table) for a single operation

Tongue Twister

Name _____

Complete the output column for each function table. Then write the corresponding letter next to the number. Read the tongue twister from table 1 to 2 and try to say it quickly three times.

1. Rule is +4

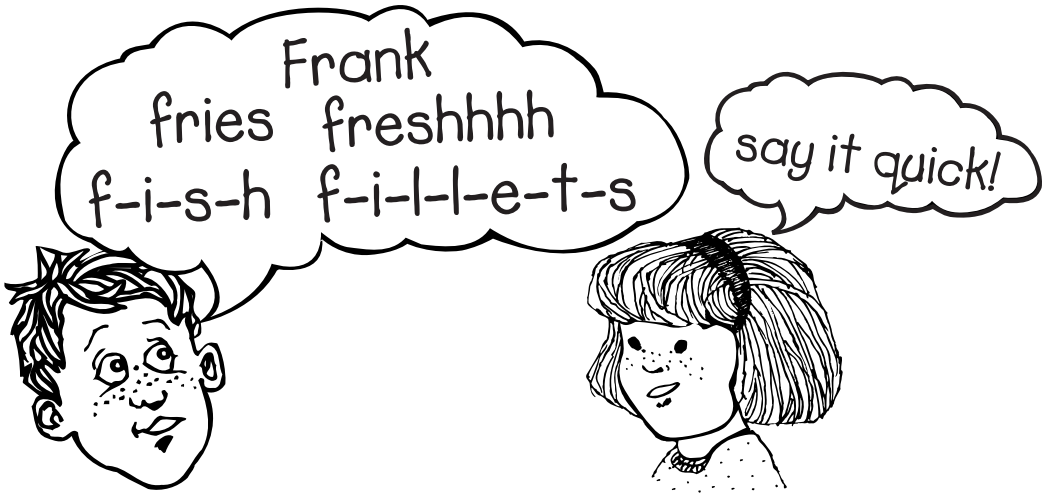
Input	Output		
2	6		
7	11		
5	9		
3		_____	
4		_____	
1		_____	
9		_____	
6		_____	

13	O
5	M
7	L
8	E
10	N

2. Rule is ×2

Input	Output		
2	4		
7	14		
8		_____	
6		_____	
1		_____	
0		_____	
3		_____	
5		_____	
9		_____	
4		_____	

8	T
6	M
16	L
10	E
12	I
0	I
2	N
18	N



Complete a function table (input/output table) for a single operation

Function Tables

Name _____

Complete each function table.

1. Rule is +4

Input	Output
1	
2	
3	
4	
5	
6	

2. Rule is ×2

Input	Output
1	
2	
3	
4	
5	
6	

3. Rule is –7

Input	Output
8	
10	
12	
15	
16	
19	

4. Rule is –3

Input	Output
9	
8	
7	
6	
5	
4	

5. Rule is +5

Input	Output
2	
4	
5	
7	
9	
10	

6. Rule is +10

Input	Output
7	
15	
6	
0	
9	
10	

Complete a function table (input/output table) for a single operation

Input/Output

Name _____

Complete each function table.

1. Rule is +3

Input	Output
1	
2	
4	
6	
8	
10	

2. Rule is ×3

Input	Output
6	
2	
5	
9	
15	
21	

3. Rule is –4

Input	Output
2	
19	
0	
5	
9	
16	

4. Rule is –2

Input	Output
9	
6	
5	
3	
6	
12	

5. Rule is +12

Input	Output
5	
16	
13	
18	
5	
12	

6. Rule is ÷2

Input	Output
10	
2	
8	
12	
20	
14	

Complete a function table (input/output table) for a single operation

Using Function Tables

Name _____

Solve each problem.

1. Tommy created a function table to help him determine how many cupcakes are in a given number of packages if there are 3 cupcakes in each package. Complete the function table, and use that to tell Tommy how many cupcakes are in 5 packages.

Rule: Number of packages ×3

Input (no. of packages)	Output (no. of cupcakes)
1	3
2	6
3	
4	
5	
6	

2. Juanita was helping organize the school's carnival, and she made a function table to tell how much a certain number of tickets cost. She knew that the school wanted to charge 25¢ for each ticket. Complete the function table to show how much each number of tickets will be.

Rule: Number of tickets ×25¢

Input (no. of tickets)	Output (amount of money in ¢)
1	25
2	50
3	
4	
5	
6	

3. Sergio and his mother were looking at his growth, and they figured that it could be mapped to a function table. From age 5 until the present, his growth fit nicely to the function table. Complete the function table and tell how tall Sergio is at age 10.

Rule: Input ×5, +85

Input (in years)	Output (in cm)
5	110
6	115
7	
8	
9	
10	

Complete a function table (input/output table) for a single operation

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, use this function table.

Rule is +3

Input	Output
1	4
5	8
2	
7	
0	
3	

1. What is the output when the input is 2?

Ⓐ 12 Ⓒ 4
Ⓑ 6 Ⓓ 5

2. What is the output when the input is 7?

Ⓐ 16 Ⓒ 13
Ⓑ 10 Ⓓ 9

3. What is the output when the input is 0?

Ⓐ 0 Ⓒ 6
Ⓑ 3 Ⓓ 20

4. What is the output when the input is 3?

Ⓐ 6 Ⓒ 24
Ⓑ 3 Ⓓ 5

For Numbers 5 through 8, use this function table.

Rule is ÷2

Input	Output
10	5
6	3
2	
8	
0	
4	

5. What is the output when the input is 2?

Ⓐ 1 Ⓒ 4
Ⓑ 2 Ⓓ none of the above

6. What is the output when the input is 8?

Ⓐ 16 Ⓒ 4
Ⓑ 10 Ⓓ none of the above

7. What is the output when the input is 0?

Ⓐ 2 Ⓒ 1
Ⓑ 0 Ⓓ none of the above

8. What is the output when the input is 4?

Ⓐ 0 Ⓒ 4
Ⓑ 6 Ⓓ none of the above

9. Draw a function table with five inputs and five outputs, utilizing the rule –2.

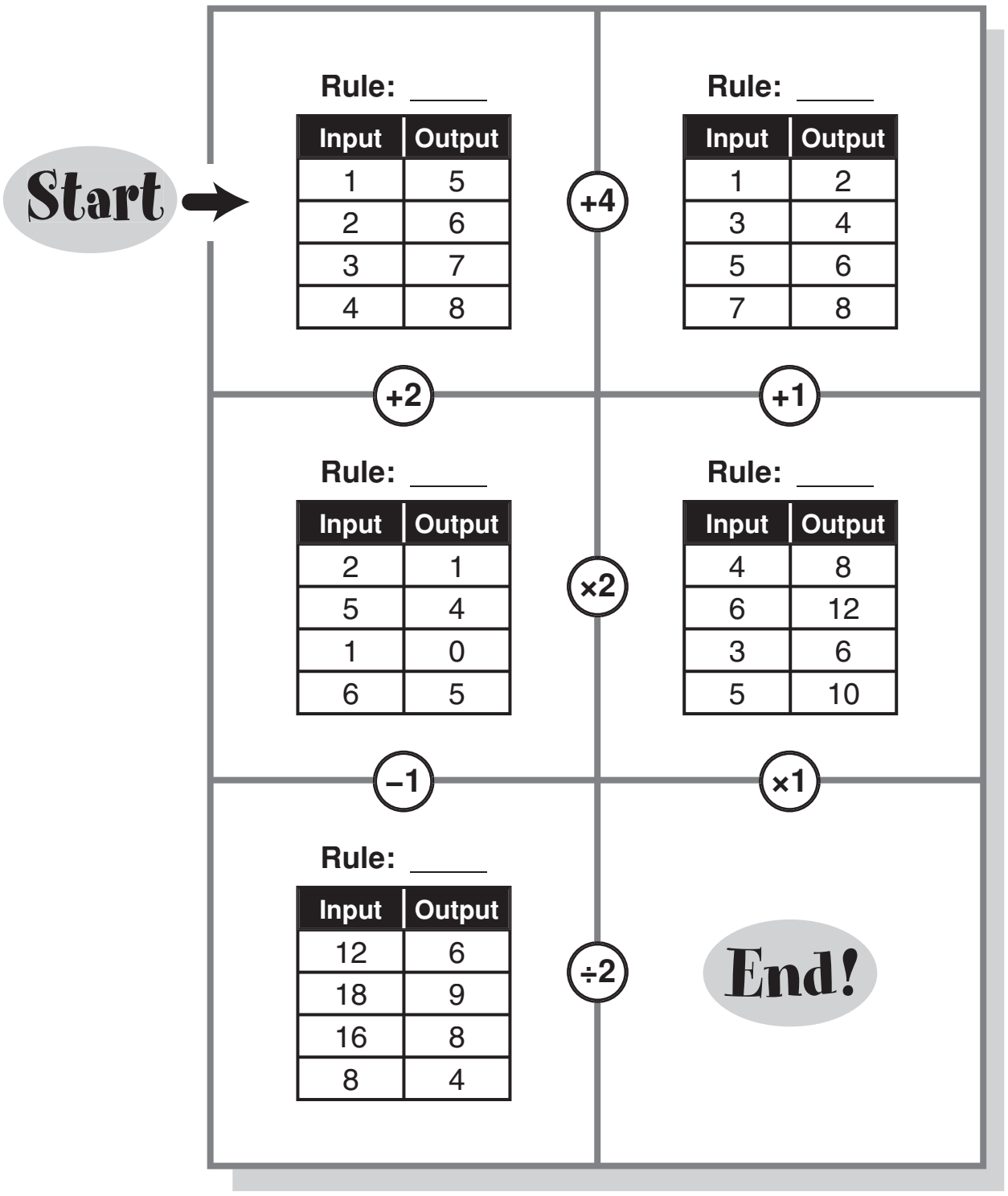
10. Draw a function table with five inputs and five outputs, utilizing the rule ×5.

Complete a function table (input/output table) for a single operation

Follow the Path

Name _____

Determine a rule for each function table. Then begin at Start and move through the circle with the correct rule to the next function table. Continue until you reach the End in the bottom right corner. Color your path as you go.



Write simple rules for a function table in the form of an expression

What Is of Most Use When It Is Used Up?

Name _____

Find the rule for each function table below. Then look for the rule at the bottom of the page. Write the letter from the function table on the line above the rule. This will spell out the solution to the riddle.

A **Rule:** _____

Input	Output
1	3
6	8
3	5
4	6

R **Rule:** _____

Input	Output
2	8
6	24
4	16
7	28

M **Rule:** _____

Input	Output
9	4
16	11
14	9
8	3

E **Rule:** _____

Input	Output
12	6
24	12
18	9
4	2

B **Rule:** _____

Input	Output
4	2
8	6
5	3
9	7

U **Rule:** _____

Input	Output
9	3
3	1
24	8
18	6

L **Rule:** _____

Input	Output
6	10
9	13
1	5
5	9

L **Rule:** _____

Input	Output
4	12
3	9
9	27
5	15

_____	_____	_____	_____	_____	_____	_____	_____
÷3	–5	–2	×4	÷2	×3	+4	+2

Write simple rules for a function table in the form of an expression

What's the Rule?

Name _____

Write the rule for each completed function table.

1. **Rule:** _____

Input	Output
1	5
2	6
3	7
4	8
5	9
6	10

2. **Rule:** _____

Input	Output
1	2
2	4
3	6
4	8
5	10
6	12

3. **Rule:** _____

Input	Output
10	8
9	7
8	6
7	5
6	4
5	3

4. **Rule:** _____

Input	Output
1	5
3	7
6	10
8	12
10	14
12	16

5. **Rule:** _____

Input	Output
10	5
22	17
16	11
19	14
8	3
28	23

6. **Rule:** _____

Input	Output
6	18
3	9
0	0
5	15
2	6
7	21

Write simple rules for a function table in the form of an expression

Find the Rule

Name _____

Write the rule for each function table and fill in the missing numbers.

1. Rule: _____

Input	Output
1	5
2	6
3	7
4	8
	9
6	

2. Rule: _____

Input	Output
2	6
3	9
5	15
9	27
	30
15	

3. Rule: _____

Input	Output
18	15
12	9
16	13
6	
	3
3	

4. Rule: _____

Input	Output
2	5
6	9
7	10
12	15
	17
16	19

5. Rule: _____

Input	Output
12	3
20	5
40	10
48	
	13
60	

6. Rule: _____

Input	Output
19	14
8	3
12	7
90	
	61
	49

Write simple rules for a function table in the form of an expression

Using Function Tables

Name _____

Solve each problem.

1. Juanita was thinking of a rule for a function table. When she was given the input of 2, she said that the output would be 4. What are two different rules that Juanita could be thinking of for her function table?

_____

_____

---

2. Tim had this function table, and he was asked to determine the rule. Tim thinks that the rule is to add 2 since 1 + 2 equals 3. Write a note to Tim either agreeing with him, or explaining to him the correct rule.

_____

_____

Rule: _____

Input	Output
1	3
0	0
3	9
5	15

---

3. Anne Marie knows that three bananas cost 93¢. She also knows that 5 bananas cost $1.55. She started to create a function table, but needs your help to determine the rule. Write the rule and then complete the remaining spaces on her function table.

Rule: _____

Input (# of bananas)	Output (cost)
3	93¢
5	$1.55
8	
10	

---

4. Herald had this function table and was asked to determine the rule. In addition, the teacher said that one of the outputs was incorrect. Herald thinks that the rule is to divide by 2 since 6 ÷ 2 equals 3. Write a note to Herald either agreeing with him, or explaining to him the correct rule. Include in your note a sentence telling Herald which one of the outputs is incorrect, and what it should be.

_____

_____

Rule: _____

Input	Output
6	3
14	11
16	8
4	2

Write simple rules for a function table in the form of an expression

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, use the following function table. The input stays the same, but the output is different for each column.

	#1	#2	#3	#4
Input	Output	Output	Output	Output
4	7	2	4	8
5	8	3	5	10
6	9	4	6	12
7	10	5	7	14

1. What is the rule for output column #1?

Ⓐ ×2 Ⓒ +3
Ⓑ +4 Ⓓ none of the above

2. What is the rule for output column #2?

Ⓐ ÷2 Ⓒ –2
Ⓑ ×1 Ⓓ none of the above

3. What is the rule for output column #3?

Ⓐ +1 Ⓒ –1
Ⓑ ×1 Ⓓ none of the above

4. What is the rule for output column #4?

Ⓐ ×2 Ⓒ +5
Ⓑ +4 Ⓓ none of the above

For Numbers 5 through 8, use the following function table. The input stays the same, but the output is different for each column.

	#5	#6	#7	#8
Input	Output	Output	Output	Output
12	14	6	48	9
16	18	8	64	13
6	8	3	24	3
10	12	5	40	7

5. What is the rule for output column #5?

Ⓐ +2 Ⓒ +1
Ⓑ +3 Ⓓ none of the above

6. What is the rule for output column #6?

Ⓐ –6 Ⓒ ÷2
Ⓑ –8 Ⓓ none of the above

7. What is the rule for output column #7?

Ⓐ +18 Ⓒ +30
Ⓑ ×3 Ⓓ none of the above

8. What is the rule for output column #8?

Ⓐ –3 Ⓒ ÷2
Ⓑ –4 Ⓓ none of the above

9. Joe is thinking of a function machine. He says that the output is 12 if the input is 4. What are two rules that he could be thinking of for his function machine?

_____

_____

10. Laura is thinking of another function machine. She said that the output is 2 if the input is 6. What are two rules that she could be thinking of for her function machine?

_____

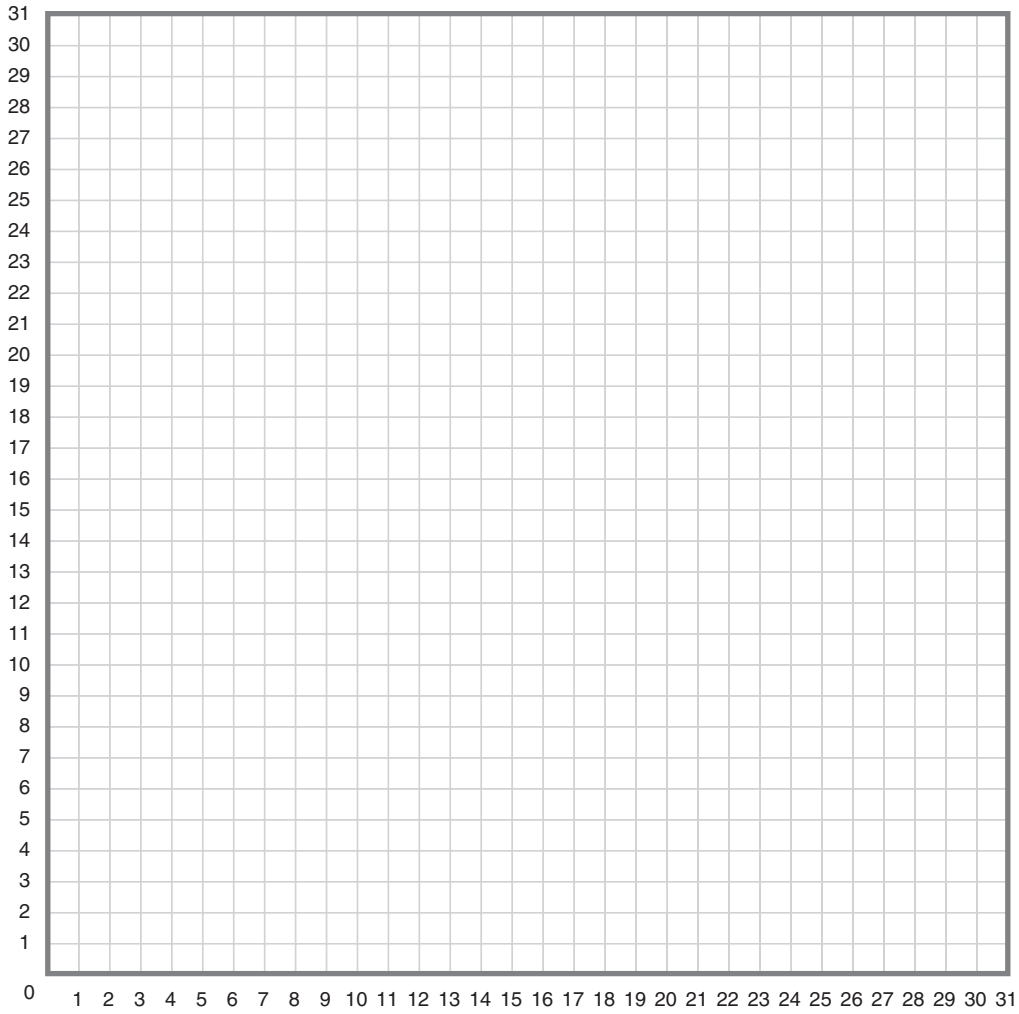
_____

Write simple rules for a function table in the form of an expression

All Smiles

Name _____

Plot the ordered pairs of numbers on the graph in the order in which they are listed, connecting them with straight lines. Start each new set of points with a new line.



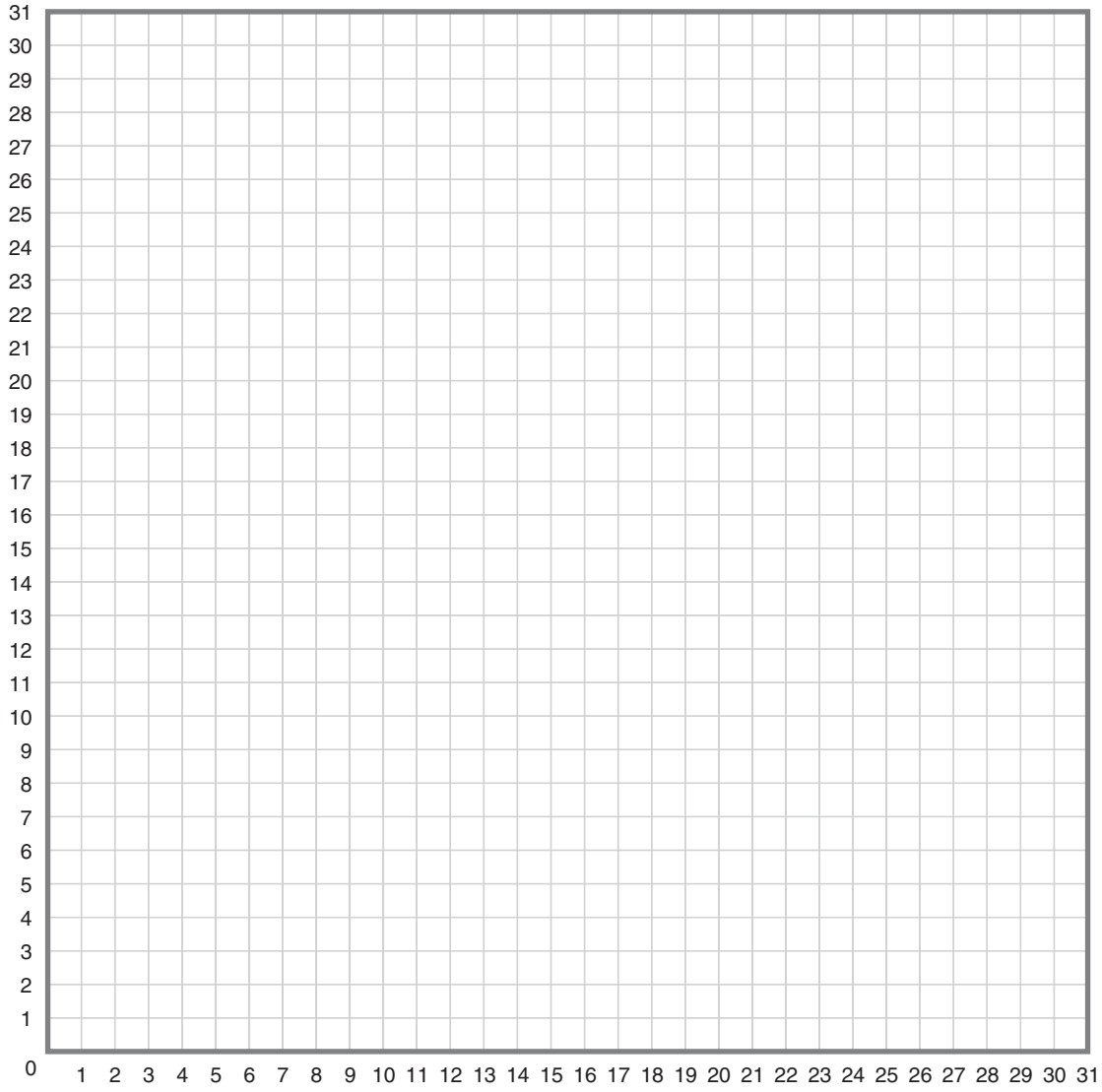
- (13, 0) (13, 9) (10, 9) (6, 12) (6, 17) (5, 17) (4, 16) (3, 16) (3, 21) (4, 21) (5, 20) (6, 20) (6, 22) (9, 29) (21, 29) (24, 22) (24, 20) (25, 20) (26, 21) (27, 21) (27, 16) (26, 16) (25, 17) (24, 17) (24, 12) (20, 9) (17, 9) (17, 0)
- (9, 16) (11, 11) (19, 11) (21, 16) (19, 16) (17, 14) (13, 14) (11, 16) (9, 16)
- (12, 25) (10, 23) (11, 22) (13, 24) (12, 25)
- (17, 24) (18, 25) (20, 23) (19, 22) (17, 24)
- (14, 22) (14, 17) (16, 17) (17, 18)

Locate and plot ordered pairs on a coordinate graph (first quadrant only)

Mystery Picture

Name _____

Plot the ordered pairs of numbers on the graph in the order in which they are listed, connecting them with straight lines. Start each new set of points with a new line.



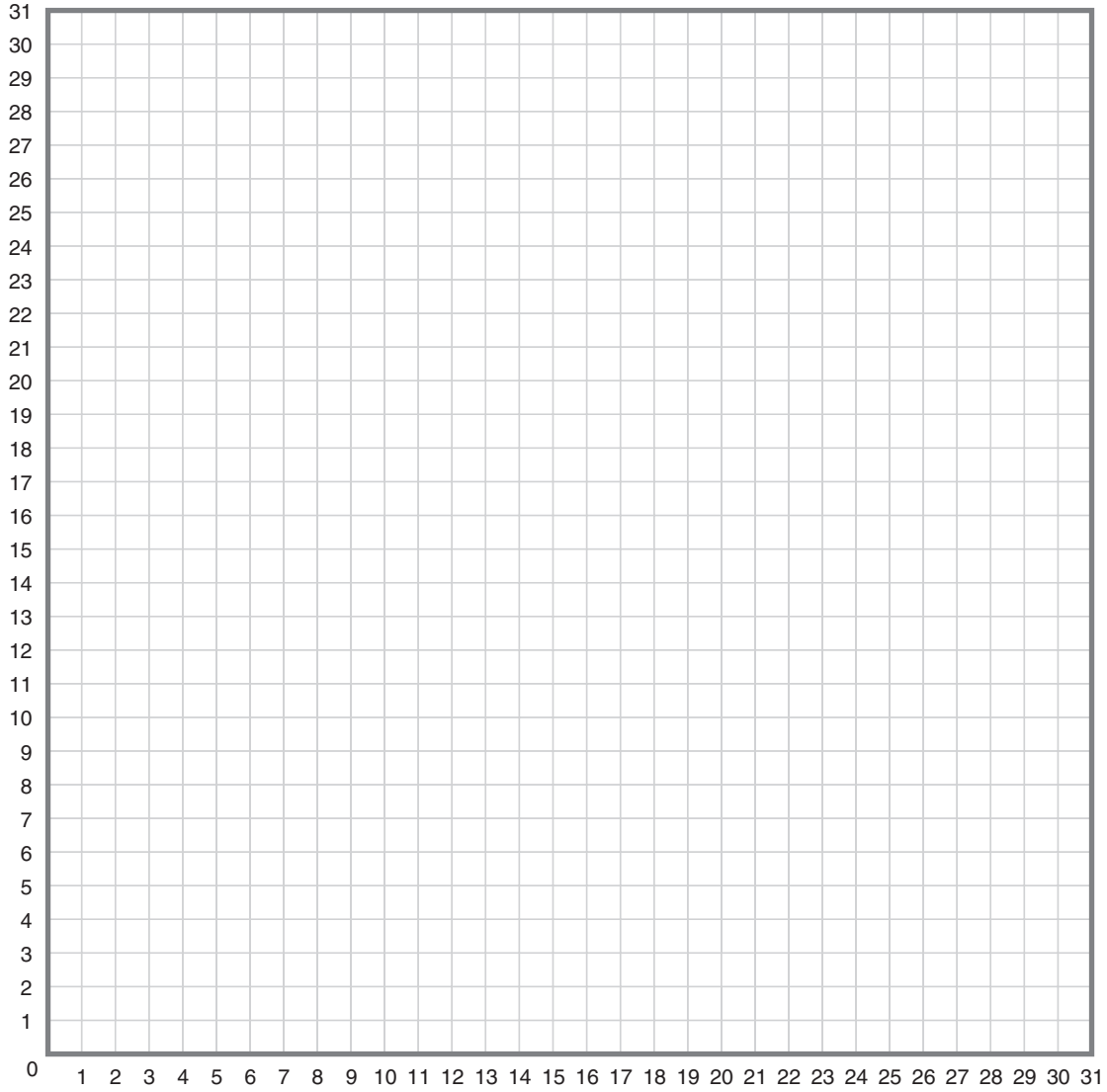
- (16, 6) (7, 21) (5, 21) (2, 24) (2, 27) (4, 29) (7, 29) (10, 26) (10, 24) (21, 11) (16, 12) (16, 6)
- (22, 17) (22, 22) (18, 23) (22, 24) (22, 28) (24, 25) (28, 26) (26, 23) (28, 19) (25, 21) (22, 17)
- (6, 23) (8, 25)
- (4, 25) (4, 27) (7, 24)

Locate and plot ordered pairs on a coordinate graph (first quadrant only)

Plot the Ordered Pairs

Name _____

Plot each of the following ordered pairs and label them with the corresponding letter.



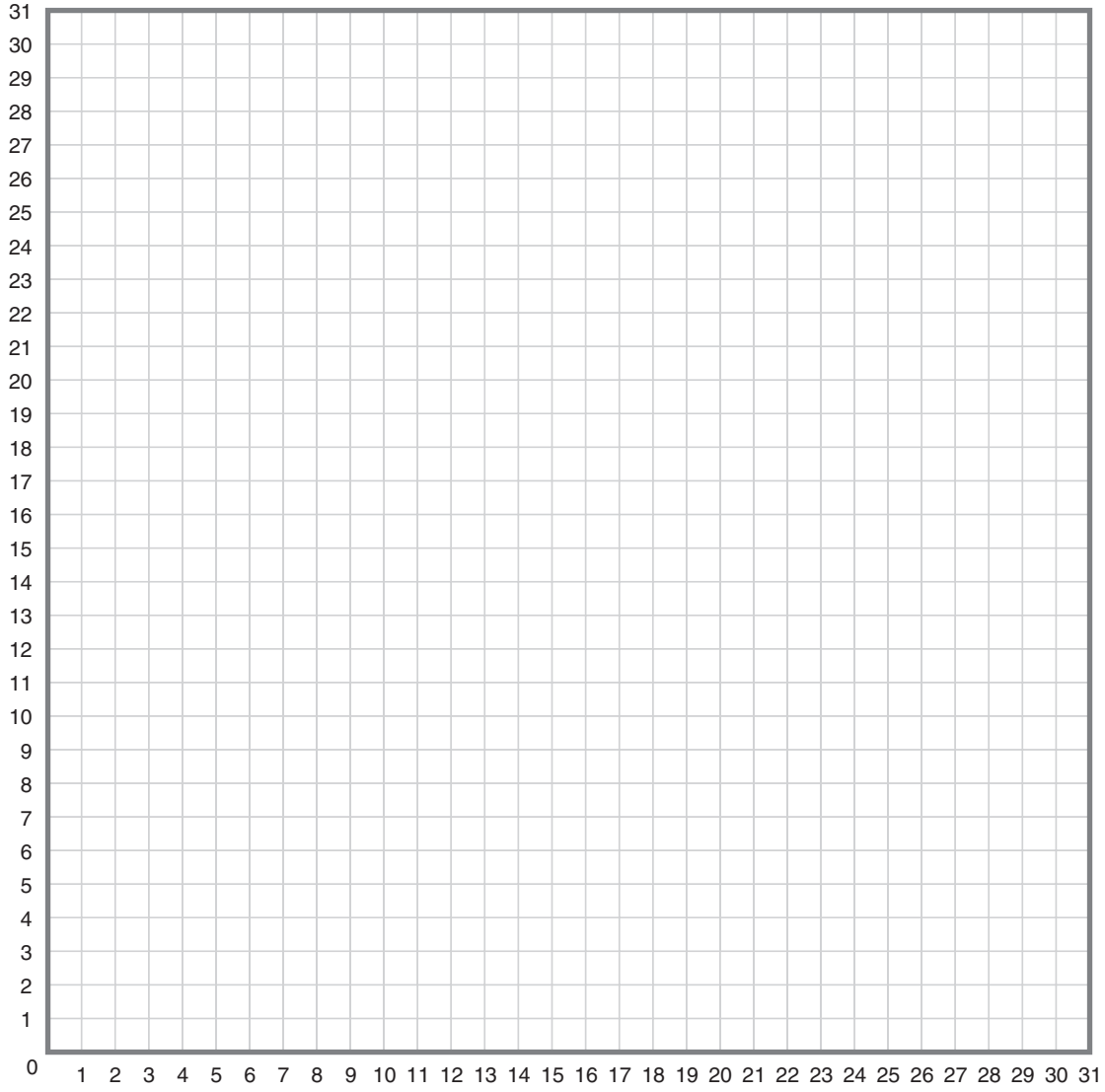
A (2, 6)	**D** (26, 5)	**G** (29, 20)	**J** (10, 29)
B (4, 9)	**E** (15, 30)	**H** (0, 0)	
C (21, 20)	**F** (18, 5)	**I** (17, 15)	

Locate and plot ordered pairs on a coordinate graph (first quadrant only)

Plot the Points

Name _____

Plot each of the following ordered pairs and label them with the corresponding letter.



A (15, 0)	**D** (4, 20)	**G** (12, 28)	**J** (28, 5)
B (14, 29)	**E** (6, 2)	**H** (18, 17)	
C (16, 20)	**F** (10, 10)	**I** (25, 22)	

Locate and plot ordered pairs on a coordinate graph (first quadrant only)

On the Map

Name _____

Solve each problem.

1. The following grid is a map of South City. Plot and label the following points on the map:

Sam's house (12, 14)

His Uncle's house (14, 2)

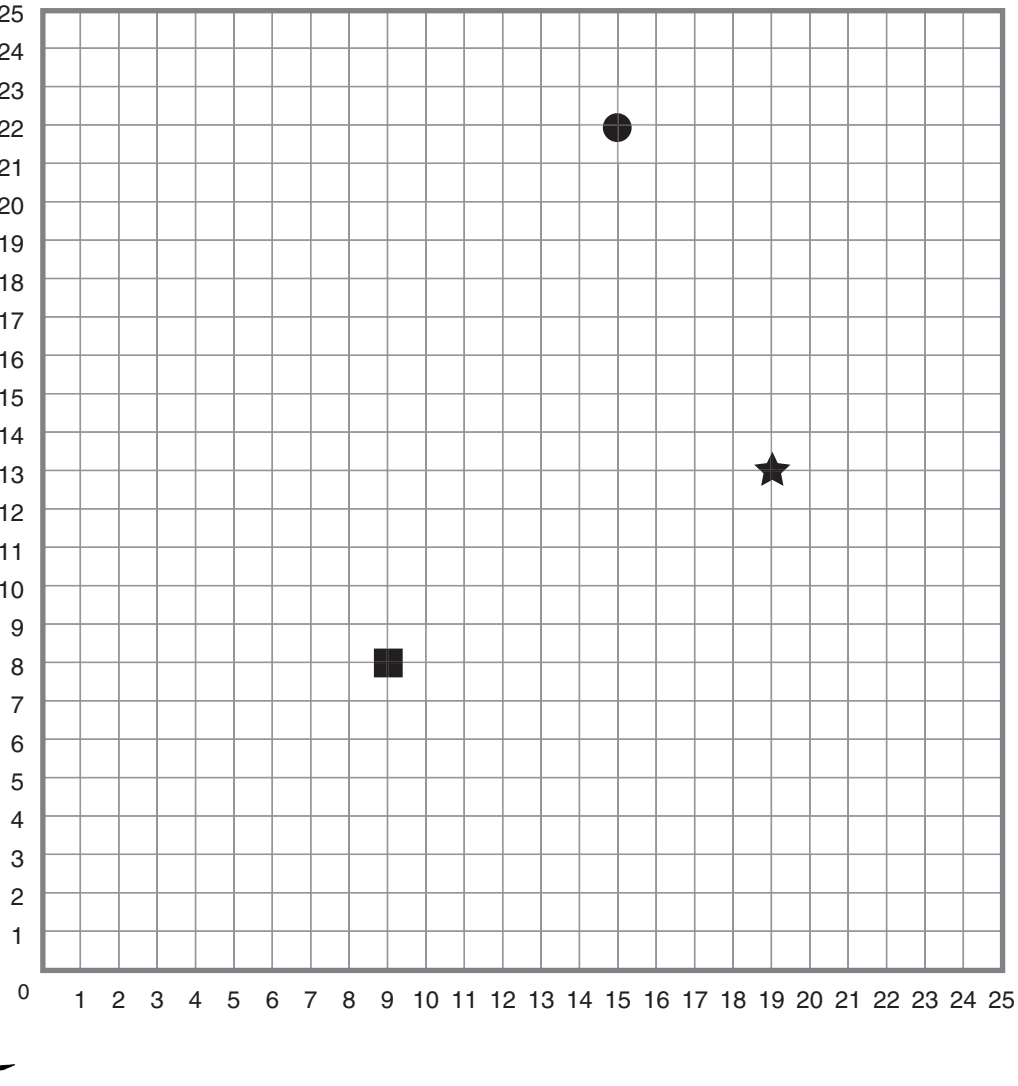
His Aunt's house (21, 6)

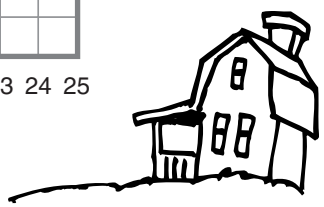
2. Identify the ordered pairs for the following places:

■ The school _____

★ His grandparents' house _____

● The grocery store _____





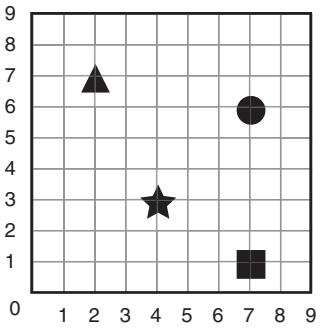
Locate and plot ordered pairs on a coordinate graph (first quadrant only)

Math Test

Name _____

Fill in the circle next to the correct answer.

Use this graph for Numbers 1 through 4.



1. What is the ordered pair of the triangle?

Ⓐ (2, 7) Ⓒ (2, 6)
Ⓑ (7, 2) Ⓓ (8, 2)

2. What is the ordered pair of the circle?

Ⓐ (6, 6) Ⓒ (7, 6)
Ⓑ (7, 7) Ⓓ (6, 7)

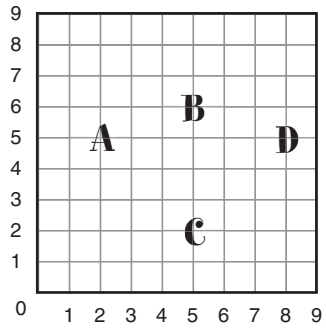
3. What is the ordered pair of the square?

Ⓐ (7, 0) Ⓒ (1, 6)
Ⓑ (6, 1) Ⓓ (7, 1)

4. What is the ordered pair of the star?

Ⓐ (4, 4) Ⓒ (3, 3)
Ⓑ (4, 3) Ⓓ (3, 4)

Use this graph for Numbers 5 through 8.



5. Which point is at (5, 2)?

Ⓐ A Ⓒ C
Ⓑ B Ⓓ D

6. Which point is at (8, 5)?

Ⓐ A Ⓒ C
Ⓑ B Ⓓ D

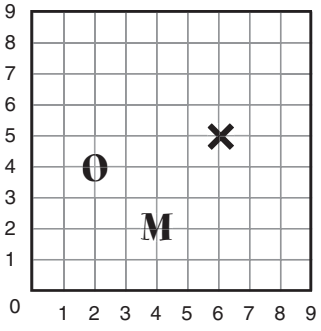
7. Which point is at (2, 5)?

Ⓐ A Ⓒ C
Ⓑ B Ⓓ D

8. Which point is at (5, 6)?

Ⓐ A Ⓒ C
Ⓑ B Ⓓ D

Use this graph for Numbers 9 and 10.



9. The ✕ on the graph represents George's house. What is the ordered pair of his house?

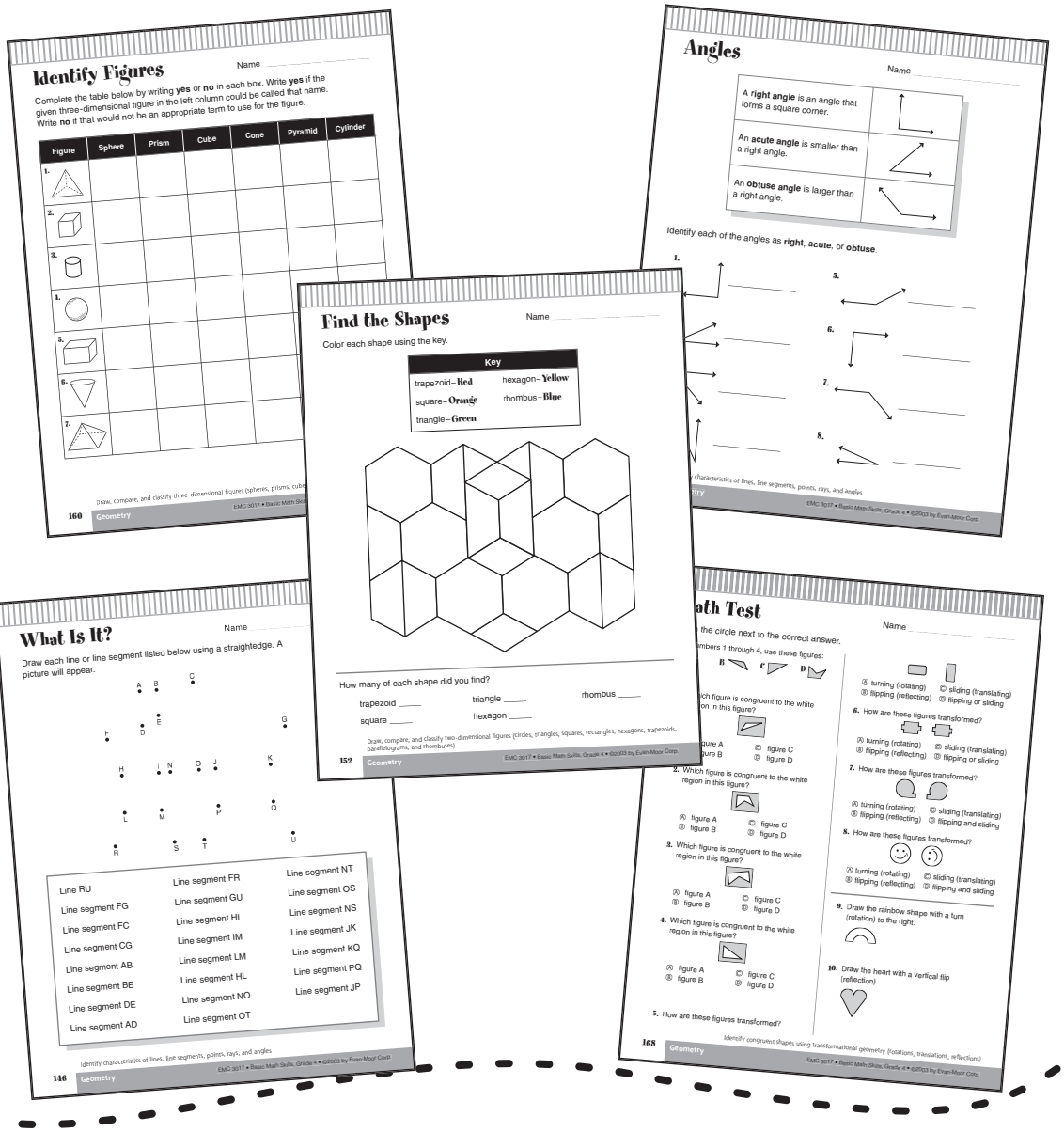
_____

10. A school is located at (2, 4) and a store is located at (4, 2). Which letter on the graph represents the school?

_____

Locate and plot ordered pairs on a coordinate graph (first quadrant only)

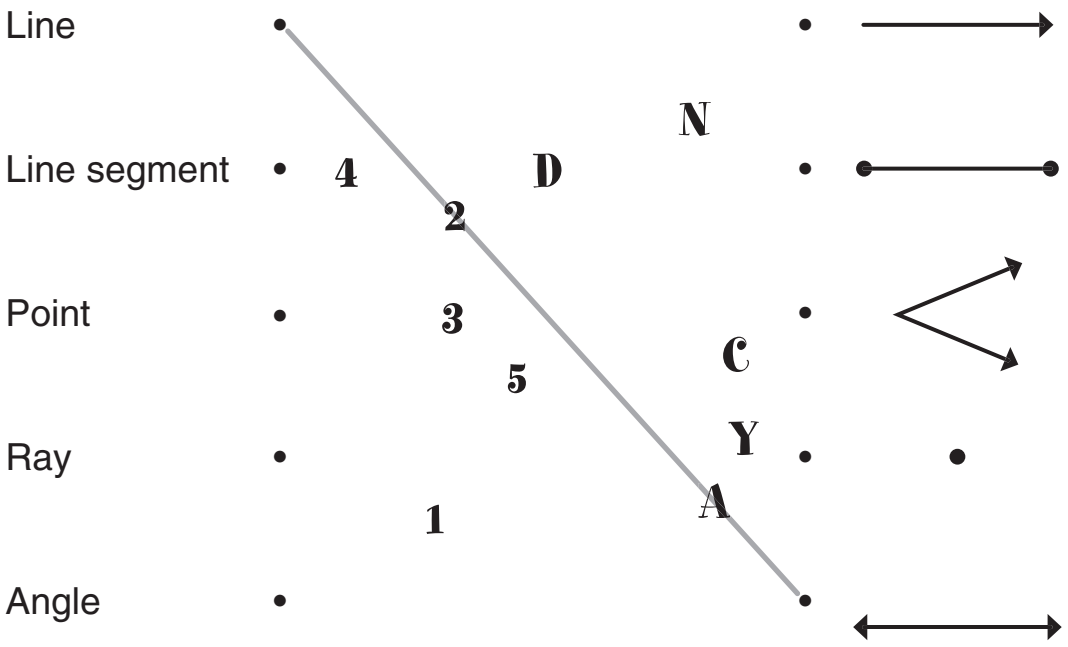
Geometry



Riddle

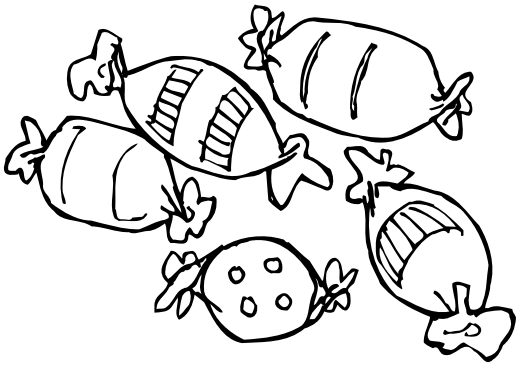
Name _____

To answer the riddle, draw a straight line connecting each term on the left with its appropriate example. The line will go through a letter and a number. Write the letter in the numbered space at the bottom to find the solution to the riddle.



How can you spell candy using only two letters?

____	A	____	____		____
1	2	3	4		5

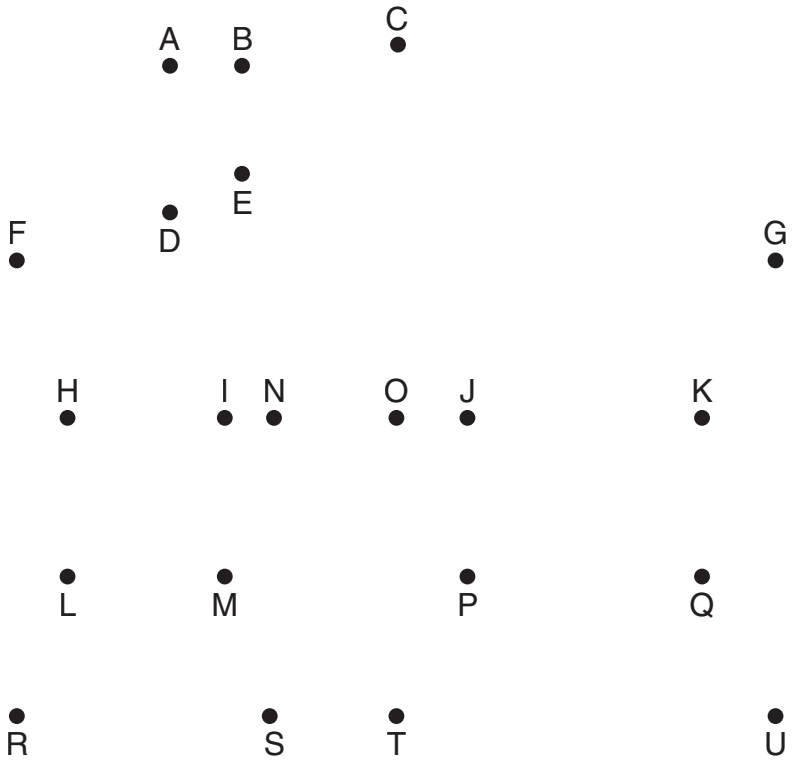


Identify characteristics of lines, line segments, points, rays, and angles

What Is It?

Name _____

Draw each line or line segment listed below using a straightedge.
A picture will appear.



Line RU	Line segment FR	Line segment NT
Line segment FG	Line segment GU	Line segment OS
Line segment FC	Line segment HI	Line segment NS
Line segment CG	Line segment IM	Line segment JK
Line segment AB	Line segment LM	Line segment KQ
Line segment BE	Line segment HL	Line segment PQ
Line segment DE	Line segment NO	Line segment JP
Line segment AD	Line segment OT	

Identify characteristics of lines, line segments, points, rays, and angles

Definitions

Name _____

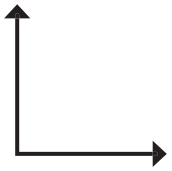
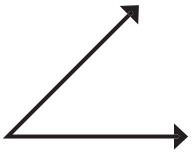
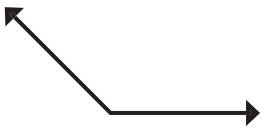
Find the best definition for each term. Draw a star in the box where the term and the definition intersect.

	Line	Line Segment	Point	Ray	Angle
An exact location in space.					
An infinite set of points forming a straight line that extends in two directions.					
A part of a line that has one endpoint and extends in one direction.					
Two rays that share an endpoint.					
A part of a line defined by two endpoints.					

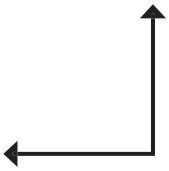
Identify characteristics of lines, line segments, points, rays, and angles

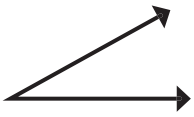
Angles

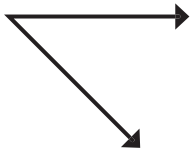
Name _____

A **right angle** is an angle that forms a square corner.	
An **acute angle** is smaller than a right angle.	
An **obtuse angle** is larger than a right angle.	

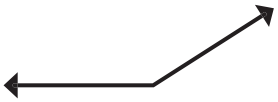
Identify each of the angles as **right**, **acute**, or **obtuse**.

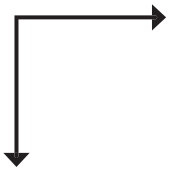
1.  _____

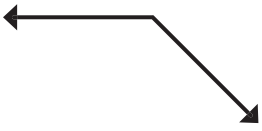
2.  _____

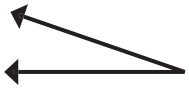
3.  _____

4.  _____

5.  _____

6.  _____

7.  _____

8.  _____

Identify characteristics of lines, line segments, points, rays, and angles

Lines, Rays, Angles

Name _____

Solve each problem.

1. On a football field, we call the end line the goal line. Is it really a line? Justify your answer.

_____

_____

2. A baseball diamond is shaped like a square with a base at each corner. Think of each base as a point. How many line segments does a baseball runner follow as he runs around all the bases and back to home plate?

_____

3. Think about a set of telephone lines that you see suspended by telephone poles. Would you describe them as lines? Why or why not?

_____

_____

4. Think of a sun's ray. Would you describe this as a ray? Why or why not?

_____

_____

5. On a clockface, there are two hands: a minute hand and an hour hand. How many times between 8:00 in the morning and 2:00 in the afternoon do the two hands form right angles?

_____

Identify characteristics of lines, line segments, points, rays, and angles

Math Test

Name _____

Fill in the circle next to the correct answer.

1. An infinite set of points forming a straight line that extends in two directions is a(an) _____.

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

2. A part of a line that has one endpoint and extends in one direction is a(an) _____.

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

3. A part of a line that has two endpoints is a(an) _____.

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

4. Two rays that share a common endpoint form a(an) _____.

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

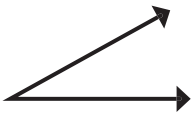
For Numbers 1 through 8, name the figure.

5. 

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

6. 

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

7. 

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

8. 

Ⓐ line Ⓒ ray
Ⓑ line segment Ⓓ angle

9. What is one way that a line is the same as a ray?

_____

_____

10. What is one difference between a line and a line segment?

_____

_____

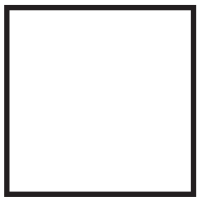
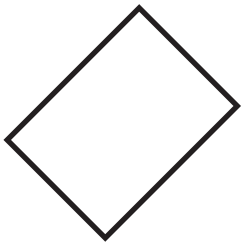
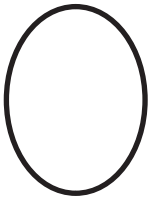
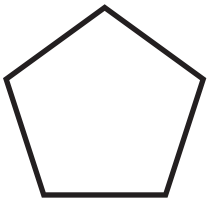
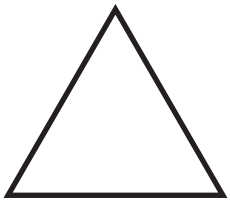
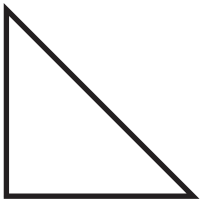
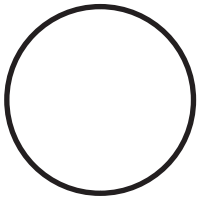
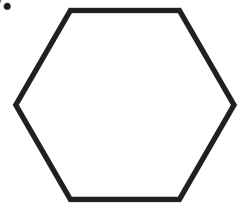
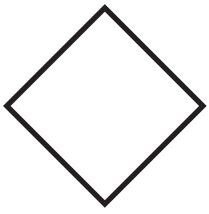
Identify characteristics of lines, line segments, points, rays, and angles

Identify the Shapes

Name _____

Color each shape using the key. Some shapes will need more than one color.

Key	
trapezoid–**Red**	circle–**Pink**
square–**Yellow**	hexagon–**Black**
rectangle–**Blue**	all other boxes–**Leave White**
triangle–**Brown**	

1. 	**4.** 	**7.** 	**10.** 
2. 	**5.** 	**8.** 	**11.** 
3. 	**6.** 	**9.** 	**12.** 

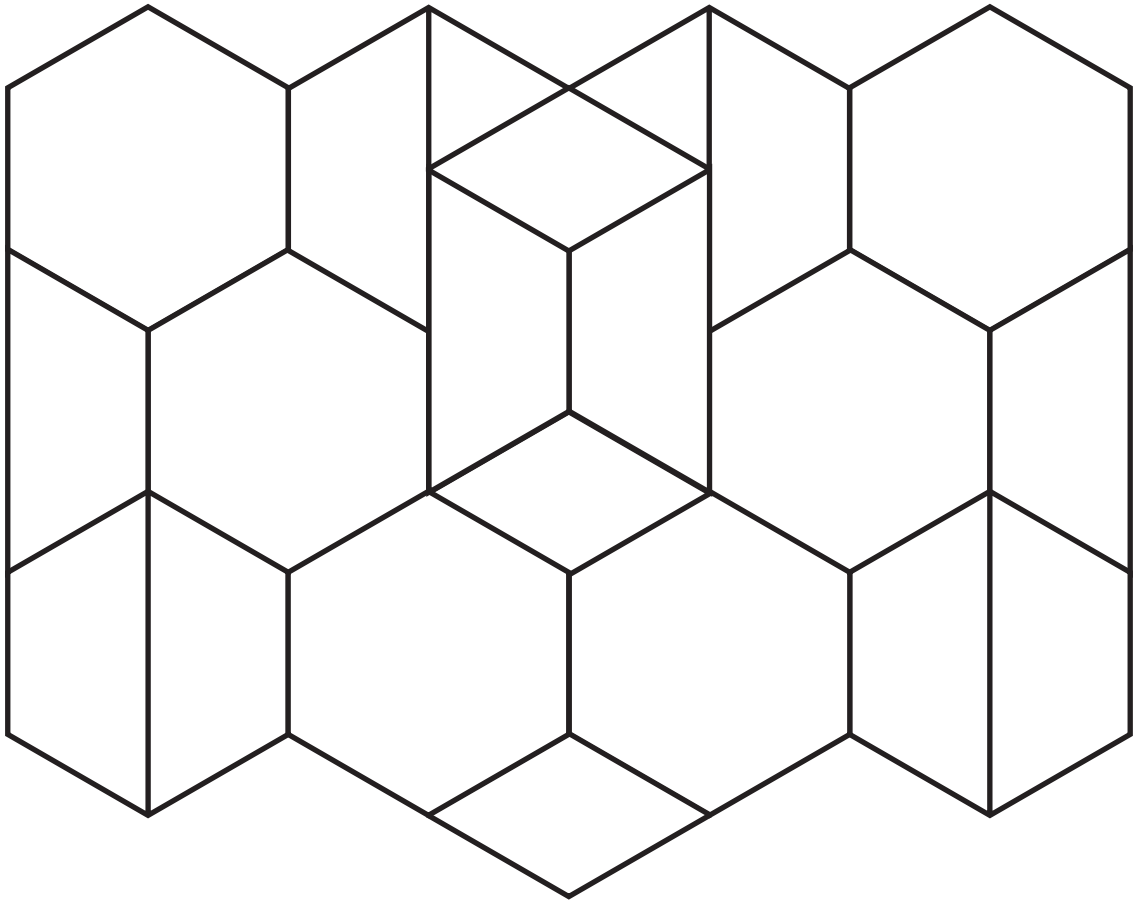
Draw, compare, and classify two-dimensional figures (circles, triangles, squares, rectangles, hexagons, trapezoids, parallelograms, and rhombuses)

Find the Shapes

Name _____

Color each shape using the key.

Key	
trapezoid–**Red**	hexagon–**Yellow**
square–**Orange**	rhombus–**Blue**
triangle–**Green**	



How many of each shape did you find?

trapezoid _____ triangle _____ rhombus _____

square _____ hexagon _____

Draw, compare, and classify two-dimensional figures (circles, triangles, squares, rectangles, hexagons, trapezoids, parallelograms, and rhombuses)

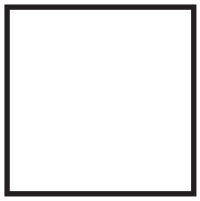
Draw the Shapes

Name _____

Draw each of the following figures.

1. circle	**2.** triangle	**3.** trapezoid
4. square	**5.** hexagon	**6.** parallelogram
7. rectangle	**8.** rhombus	**9.** quadrilateral

10. List four correct mathematical terms that could describe this shape.



_____

_____

_____

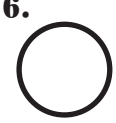
_____

Draw, compare, and classify two-dimensional figures (circles, triangles, squares, rectangles, hexagons, trapezoids, parallelograms, and rhombuses)

Name the Shapes

Name _____

Complete the table. Write **yes** in all boxes that name each shape.
Some shapes will have more than one name.

Shape	Circle	Triangle	Square	Rectangle	Hexagon	Trapezoid	Parallel-ogram	Rhombus
1. 								
2. 								
3. 								
4. 								
5. 								
6. 								
7. 								
8. 								

Draw, compare, and classify two-dimensional figures (circles, triangles, squares, rectangles, hexagons, trapezoids, parallelograms, and rhombuses)

Shapes All Around Us

Name _____

Look around the classroom for objects that have the shapes listed below. Draw a picture of the object and outline the shape.

Square	Rectangle
Triangle	**Circle**
Trapezoid	**Rhombus**

Draw, compare, and classify two-dimensional figures (circles, triangles, squares, rectangles, hexagons, trapezoids, parallelograms, and rhombuses)

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numers 1 and 2, name the figure.

1. 

Ⓐ square
Ⓑ rectangle
Ⓒ trapezoid
Ⓓ none of the above

2. 

Ⓐ square
Ⓑ rectangle
Ⓒ parallelogram
Ⓓ all of the above

3. If you draw a diagonal across a rectangle, what do you end up with?

Ⓐ 2 squares
Ⓑ 2 rectangles
Ⓒ 2 triangles
Ⓓ 2 trapezoids

4. A square is a rectangle.

Ⓐ This is always true.
Ⓑ This is true some of the time, but not very often.
Ⓒ This is true most of the time, but there are exceptions.
Ⓓ This is never true.

5. A trapezoid has _____.

Ⓐ four congruent sides
Ⓑ one pair of parallel sides
Ⓒ four right angles
Ⓓ two pairs of parallel sides

6. A circle has _____.

Ⓐ four sides
Ⓑ one right angle
Ⓒ two parallel sides
Ⓓ none of the above

7. A triangle has _____.

Ⓐ three sides
Ⓑ three right angles
Ⓒ four congruent sides
Ⓓ all of the above

8. A hexagon has _____.

Ⓐ four sides
Ⓑ six angles
Ⓒ three angles
Ⓓ none of the above

9. Draw a quadrilateral that has the following characteristics: one pair of parallel sides, two sides that are congruent, and two sides that are not congruent.

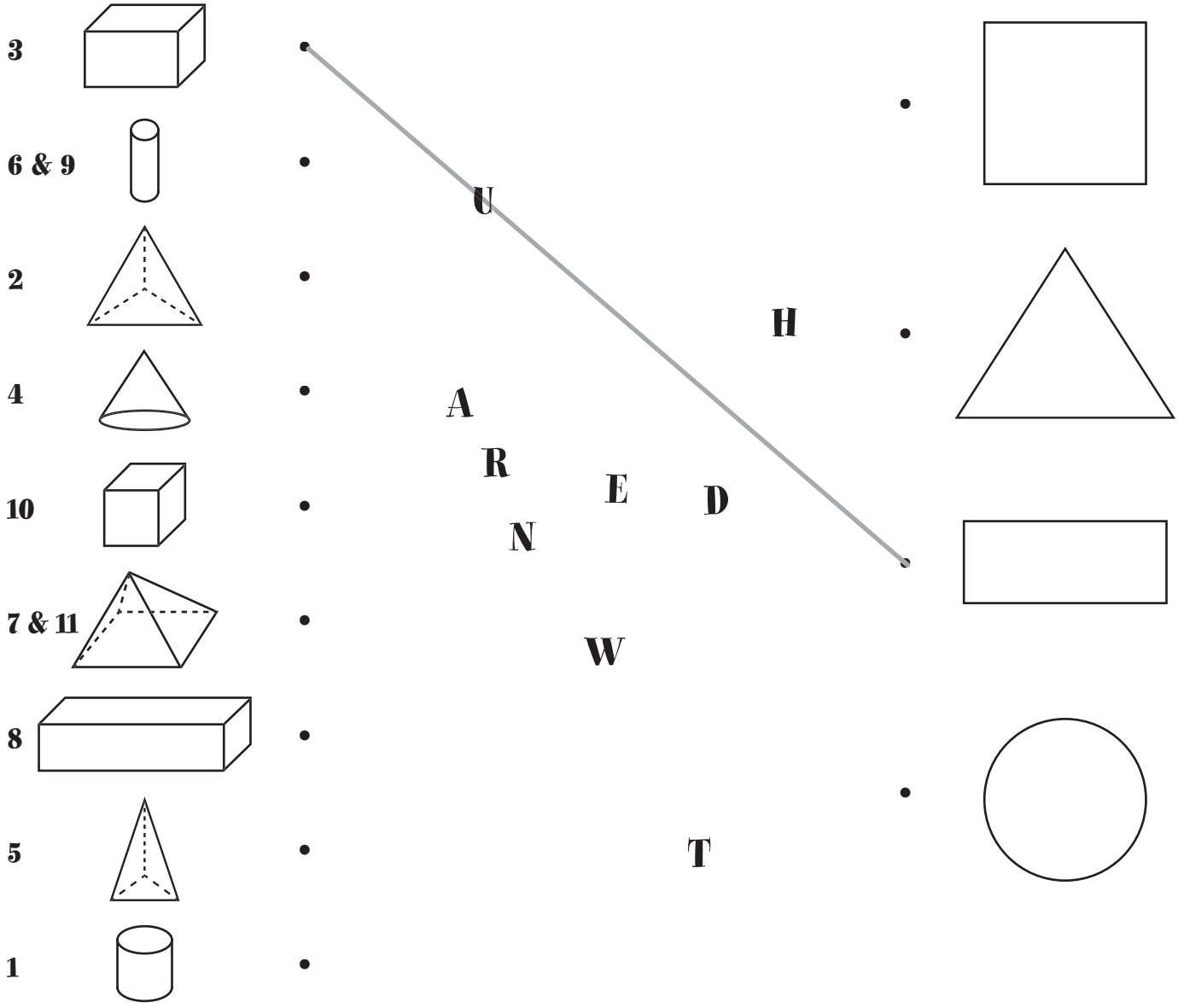
10. Draw a figure that has the following characteristics: four congruent sides and no right angles.

Draw, compare, and classify two-dimensional figures (circles, triangles, squares, rectangles, hexagons, trapezoids, parallelograms, and rhombuses)

What Does a Rain Cloud Wear Under Its Coat?

Name _____

To solve this riddle, draw a straight line between each figure on the left with the shape of its base on the right. Each line will go through one letter. Write that letter on the line(s) corresponding to the number at the bottom of the page. The letters will spell out the answer to the riddle.



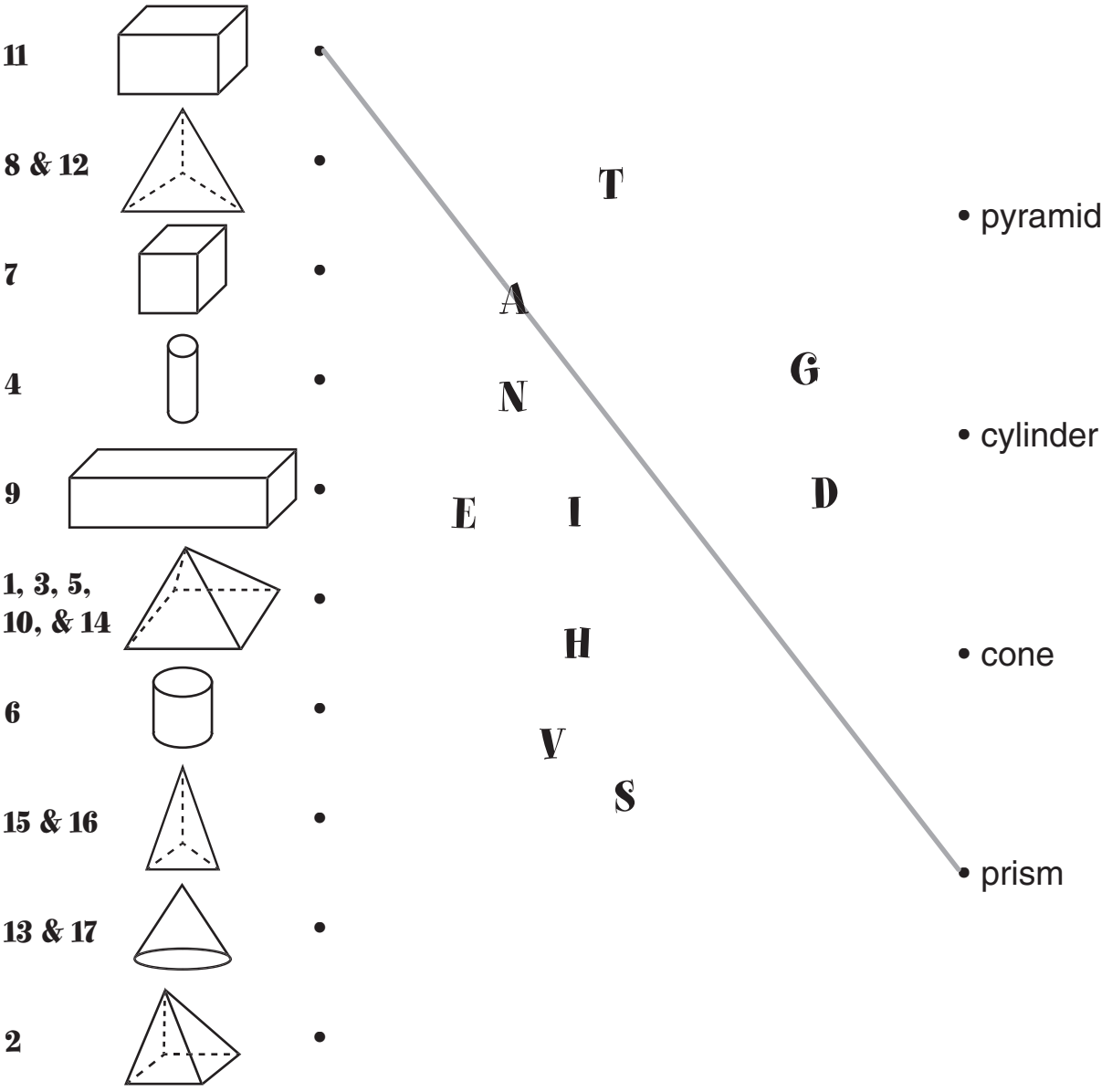
1	2	3	4	5	6	7	8	9	10	11
		U								

Draw, compare, and classify three-dimensional figures (spheres, prisms, cubes, cones, pyramids, and cylinders)

Tongue Twister

Name _____

Draw a straight line connecting each figure on the left with the correct term on the right. Each line will go through one letter. Write that letter on the line(s) corresponding to the number in front of each figure. The letters will spell out a tongue twister. Try to say it fast three times.



1	2	3	4		5	6	7	8	9
10	11	12	13		14	15	16	17	

Draw, compare, and classify three-dimensional figures (spheres, prisms, cubes, cones, pyramids, and cylinders)

Draw the Figure

Name _____

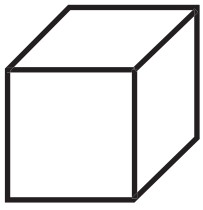
Draw each of the following figures.

1. Sphere	**2.** Pyramid
3. Prism	**4.** Cylinder
5. Cone	**6.** Cube

7. Give two correct mathematical terms that could describe this shape.

_____

_____

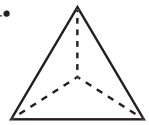
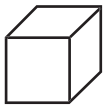
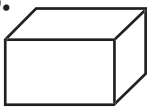
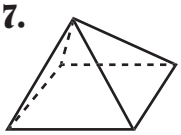


Draw, compare, and classify three-dimensional figures (spheres, prisms, cubes, cones, pyramids, and cylinders)

Identify Figures

Name _____

Complete the table below by writing **yes** or **no** in each box. Write **yes** if the given three-dimensional figure in the left column could be called that name. Write **no** if that would not be an appropriate term to use for the figure.

Figure	Sphere	Prism	Cube	Cone	Pyramid	Cylinder
1. 						
2. 						
3. 						
4. 						
5. 						
6. 						
7. 						

Draw, compare, and classify three-dimensional figures (spheres, prisms, cubes, cones, pyramids, and cylinders)

Describing Figures

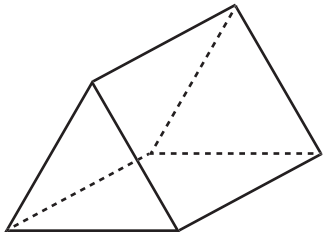
Name _____

Answer each question.

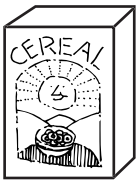
1. Brandon is talking to his grandpa on the phone and is trying to describe the shape of his new tent. What shape would you call this tent? How would you describe it?

_____

_____



2. Tim has the box of cereal pictured below:



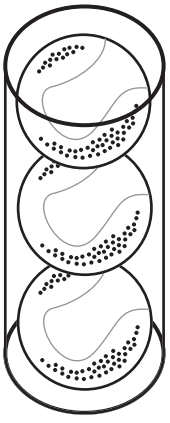
Tim is going to cut along the edges of the box. Then he will open up all the flaps and lay it flat on the table to create the net of the cereal box. Draw what the net will look like.

3. Julia is building a model of a pyramid and needs your help. She knows that she wants the base of the pyramid to be a square. What she doesn't know is what shape each of the other faces should be. Sketch a net of the pyramid, showing the base and the other faces connected to the base.

4. Angel is describing her can of three tennis balls to the class without them seeing what she is holding. Help her out with the names of the figures that she might use. Write a brief description that she could read to her class to help them guess what she's holding.

_____

_____



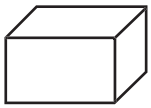
Draw, compare, and classify three-dimensional figures (spheres, prisms, cubes, cones, pyramids, and cylinders)

Math Test

Name _____

Fill in the circle next to the correct answer.

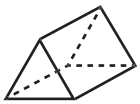
For Numbers 1 through 4, identify the correct term for each figure.

1. 

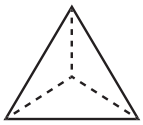
Ⓐ pyramid
Ⓑ cube
Ⓒ prism
Ⓓ cylinder

2. 

Ⓐ pyramid
Ⓑ cube
Ⓒ prism
Ⓓ cylinder

3. 

Ⓐ pyramid
Ⓑ cube
Ⓒ prism
Ⓓ cylinder

4. 

Ⓐ pyramid
Ⓑ cube
Ⓒ prism
Ⓓ cylinder

5. All pyramids have _____.

Ⓐ a triangular base
Ⓑ a rectangular base
Ⓒ triangular faces coming up from the base
Ⓓ two parallel bases

6. All cylinders have _____.

Ⓐ circular bases
Ⓑ square bases
Ⓒ triangular bases
Ⓓ none of the above

7. All cubes have _____.

Ⓐ six faces
Ⓑ square bases
Ⓒ congruent faces
Ⓓ all of the above

8. All cones have _____.

Ⓐ two square bases
Ⓑ one circular base
Ⓒ a triangular base
Ⓓ two circular bases

9. List two real-world examples of where you might see a sphere.

_____

_____

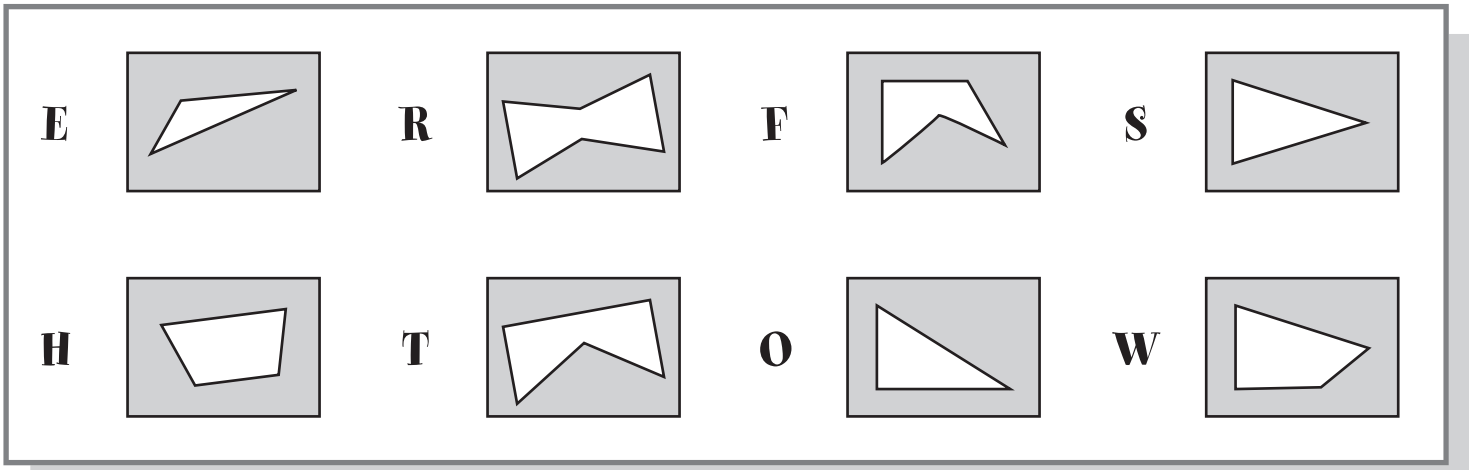
10. Draw a picture of a triangular pyramid.

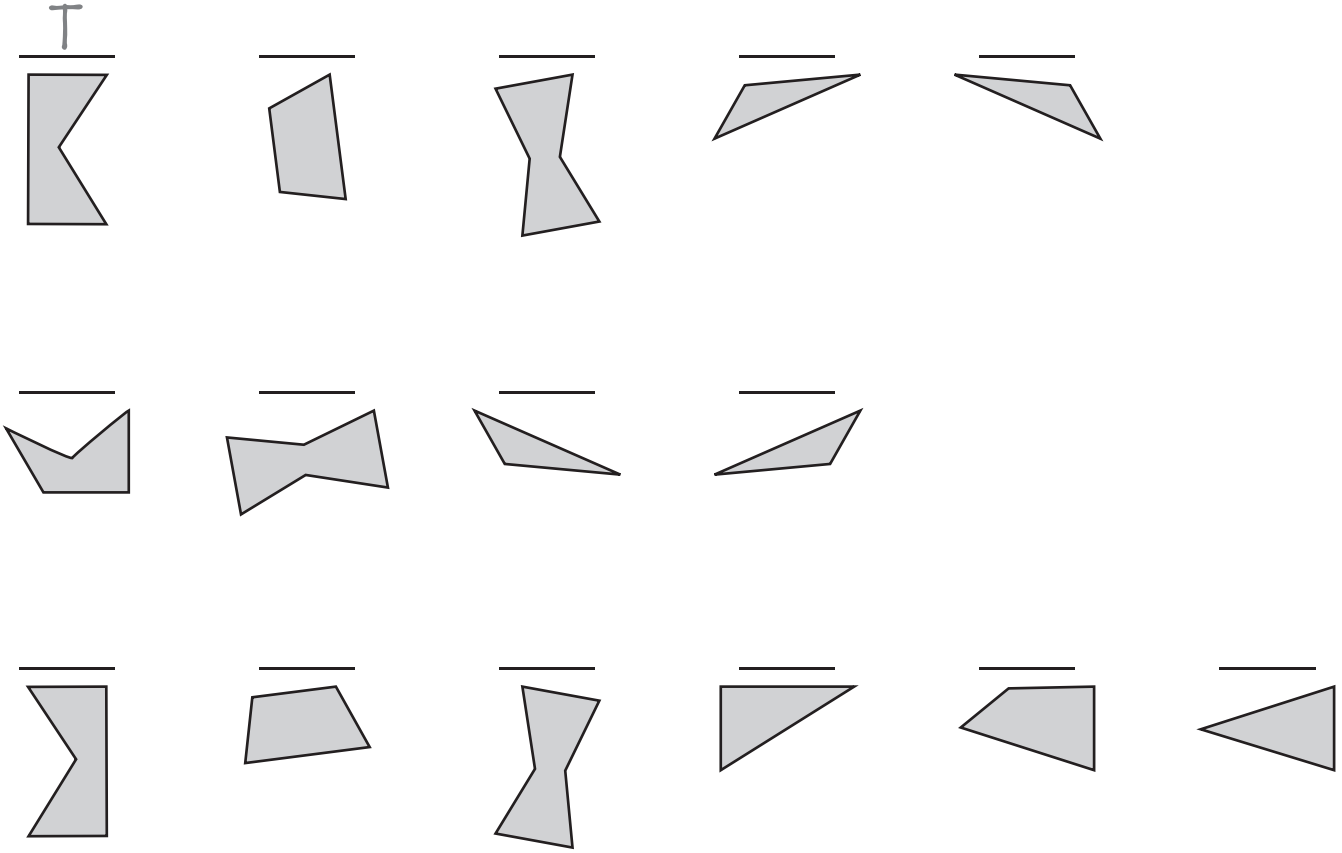
Draw, compare, and classify three-dimensional figures (spheres, prisms, cubes, cones, pyramids, and cylinders)

Tongue Twister

Name _____

Look at each white figure in the box. Then write the letter on the line above the congruent shape. The shape may be rotated or reflected. After completing the puzzle, read the tongue twister and try to say it quickly three times.



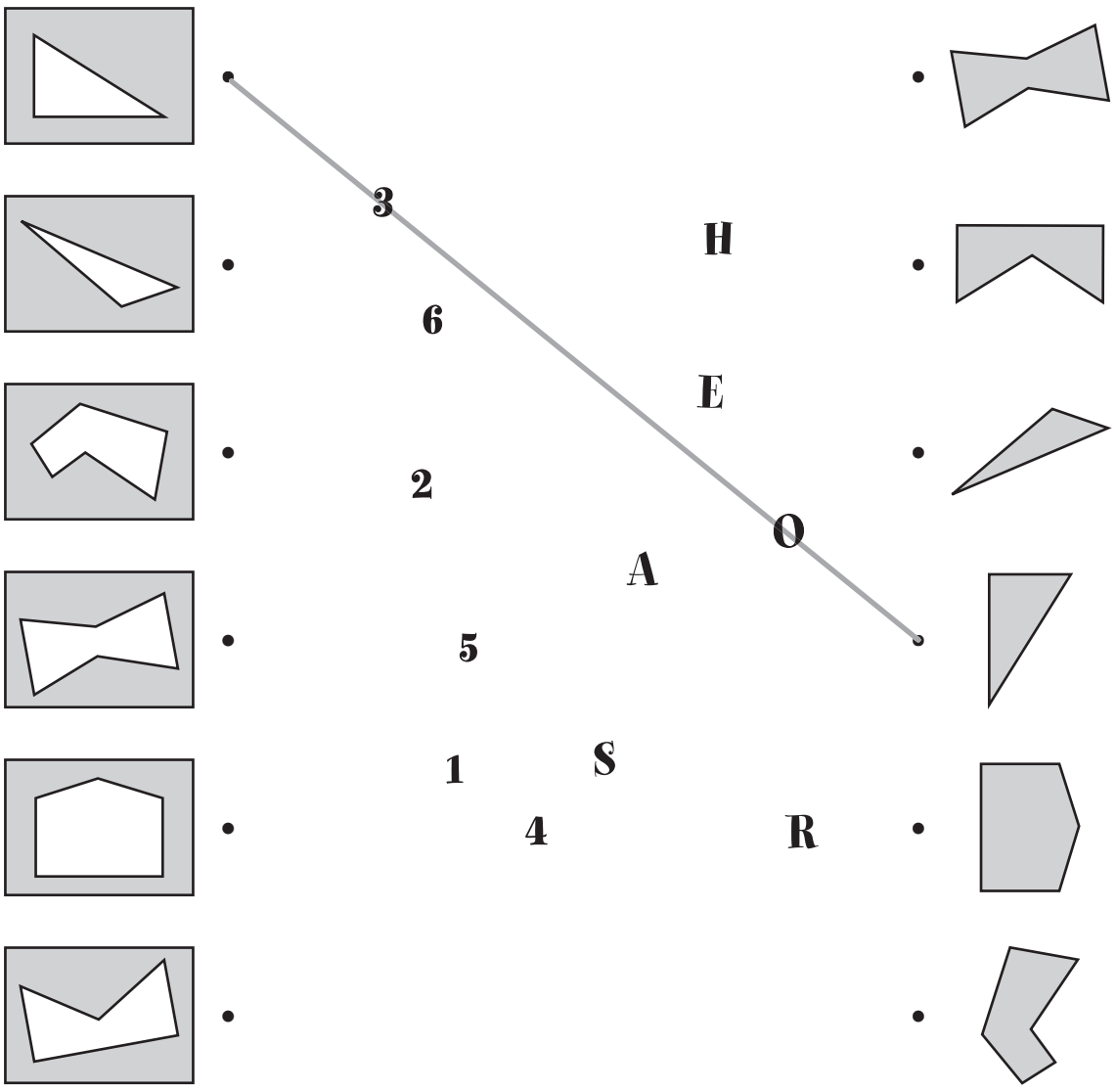


Identify congruent shapes using transformational geometry (rotations, translations, reflections)

Who Sleeps with His Shoes On?

Name _____

To solve the riddle, draw a straight line between each figure on the left with its congruent figure on the right. Each line will go through one number and one letter. Write the letters in order to spell out the answer to the riddle.



1	2	3	4	5	6
		O			

Identify congruent shapes using transformational geometry (rotations, translations, reflections)

Flip, Slide, or Turn

Name _____

Look at each shape on the left and write how the shape is transformed to the new position on the right. It could be **turned** (rotated), **slid** (translated), or **flipped** (reflected).

1.  _____

2.  _____

3.  _____

4.  _____

5.  _____

6.  _____

7.  _____

8.  _____

Identify congruent shapes using transformational geometry (rotations, translations, reflections)

Transformations

Name _____

Look at each shape on the left and write how the shape is transformed to the new position on the right. It could be **turned** (rotated), **slid** (translated), or **flipped** (reflected).

1.  _____

2.  _____

3.  _____

4.  _____

5.  _____

6.  _____

7.  _____

8.  _____

Identify congruent shapes using transformational geometry (rotations, translations, reflections)

Quilt Squares

Name _____

Figure A represents a quilt with nine squares. The top left square is the original square. On Figure B, write **slide**, **turn**, or **flip** to tell how the other squares have been transformed from the original.

Figure A

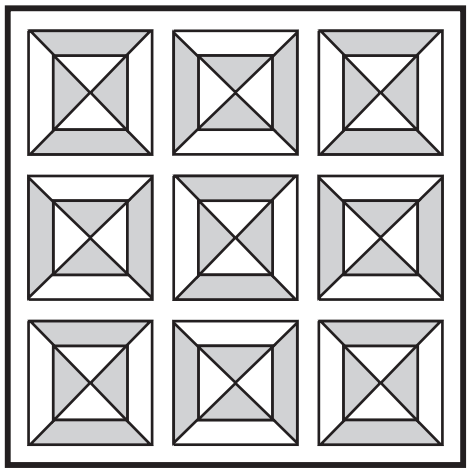


Figure B

1. original	**2.** _____	**3.** _____
4. _____	**5.** _____	**6.** _____
7. _____	**8.** _____	**9.** _____

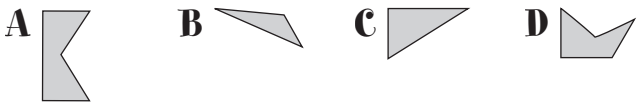
Identify congruent shapes using transformational geometry (rotations, translations, reflections)

Math Test

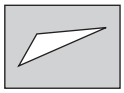
Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, use these figures:

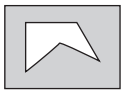


1. Which figure is congruent to the white region in this figure?



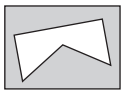
Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

2. Which figure is congruent to the white region in this figure?



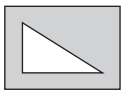
Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

3. Which figure is congruent to the white region in this figure?



Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

4. Which figure is congruent to the white region in this figure?



Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

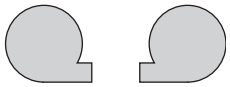
5. How are these figures transformed?

Ⓐ turned (rotated) Ⓒ slid (translated)
Ⓑ flipped (reflected) Ⓓ flipped or slid

6. How are these figures transformed?

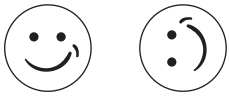
Ⓐ turned (rotated) Ⓒ slid (translated)
Ⓑ flipped (reflected) Ⓓ flipped or slid

7. How are these figures transformed?



Ⓐ turned(rotated) Ⓒ slid (translated)
Ⓑ flipped (reflected) Ⓓ flipped and slid

8. How are these figures transformed?



Ⓐ turned (rotated) Ⓒ slid (translated)
Ⓑ flipped (reflected) Ⓓ flipped and slid

9. Draw the rainbow shape with a turn (rotation) to the right.

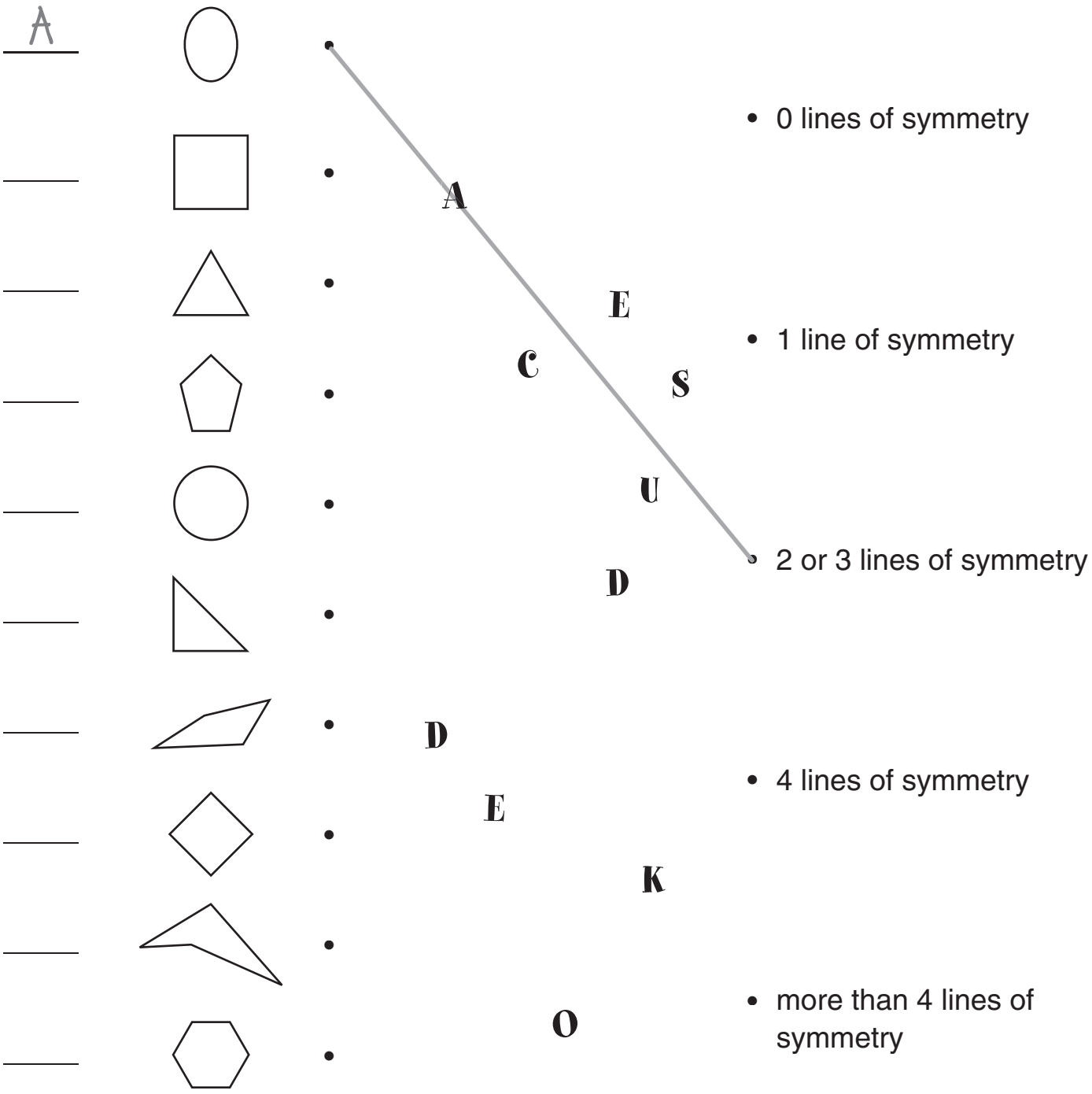
10. Draw the heart with a vertical flip (reflection).

Identify congruent shapes using transformational geometry (rotations, translations, reflections)

What Kind of Suit Does a Duck Wear?

Name _____

To solve the riddle, draw a line connecting the figure on the left with the number of lines of symmetry it has on the right. Write the letter that the line passes through in front of the figure. Read the answer from top to bottom.



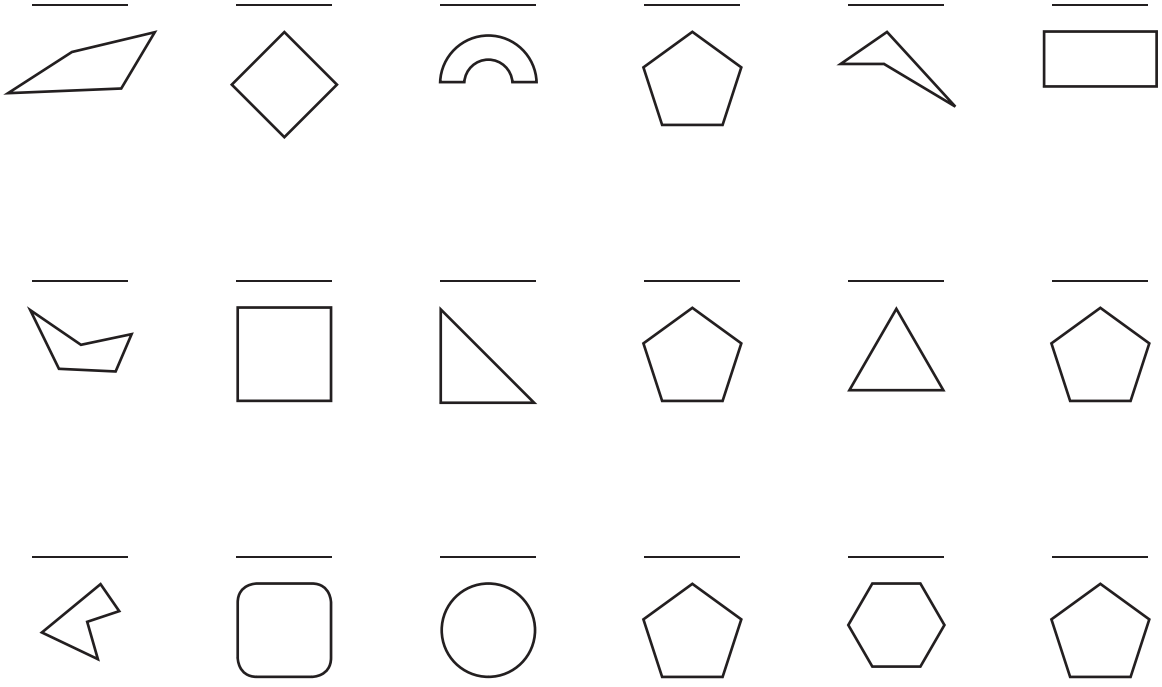
Identify lines of symmetry in two-dimensional shapes

Tongue Twister

Name _____

Look at each figure at the bottom of the page and determine how many lines of symmetry it has. Then look at the key and write the letter on each line above the figure. Read the tongue twister and try to say it quickly three times.

C	0 lines of symmetry	**R**	4 lines of symmetry
I	1 line of symmetry	**S**	5 lines of symmetry
O	2 lines of symmetry	**T**	6 lines of symmetry
P	3 lines of symmetry	**U**	more than 6 lines of symmetry



Identify lines of symmetry in two-dimensional shapes

Alphabet Symmetry

Name _____

The letters of the alphabet are written below. Determine how many lines of symmetry each letter has. If it doesn't have any lines of symmetry, write **0**.

A ____

B ____

C ____

D ____

E ____

F ____

G ____

H ____

I ____

J ____

K ____

L ____

M ____

N ____

O ____

P ____

Q ____

R ____

S ____

T ____

U ____

V ____

W ____

X ____

Y ____

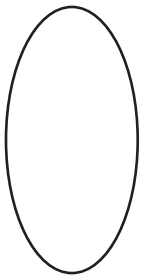
Z ____

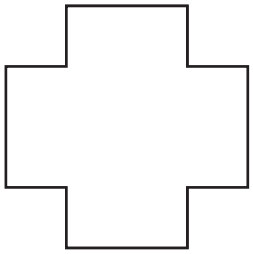
Identify lines of symmetry in two-dimensional shapes

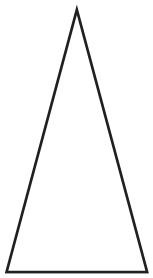
Draw Lines of Symmetry

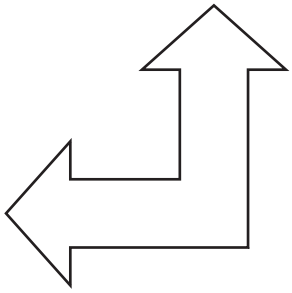
Name _____

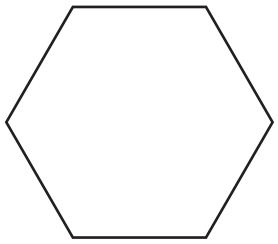
Draw lines of symmetry on the following figures. Then, next to each figure, write the number of lines of symmetry that figure has.

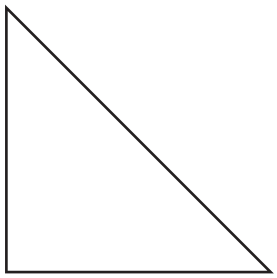
1.  _____

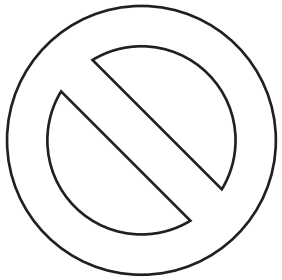
2.  _____

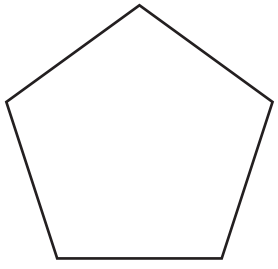
3.  _____

4.  _____

5.  _____

6.  _____

7.  _____

8.  _____

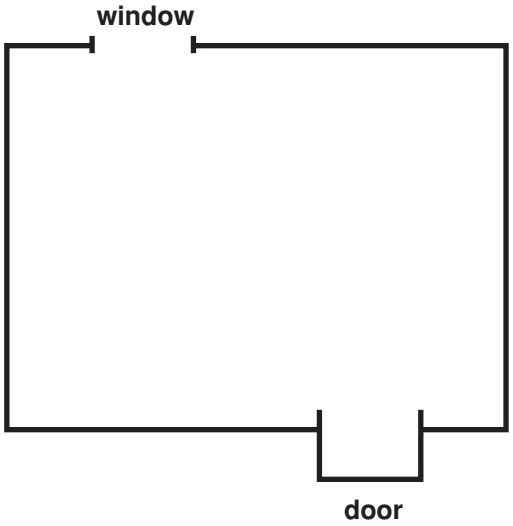
Identify lines of symmetry in two-dimensional shapes

Using Symmetry

Name _____

Solve each problem.

1. Twins Sam and George share a bedroom that is rectangular in shape. They would like to divide the room into two equal parts that are symmetrical so they can each have the same amount of space. Divide the room for them by drawing a line of symmetry on this rectangle. Why did you decide to divide it this way?

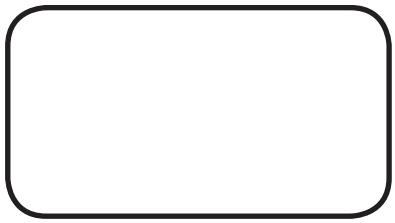


_____

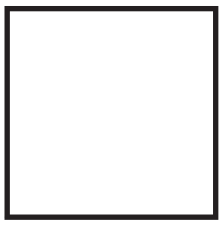
_____

_____

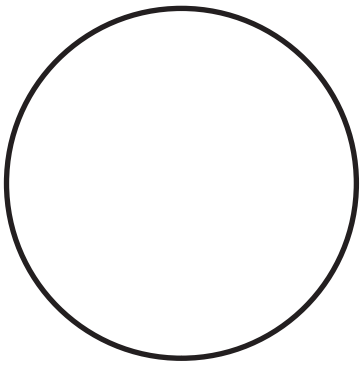
2. Susan and her sister made a cake. They want to divide it evenly between the two of them. Help Susan and her sister by drawing a line of symmetry, dividing the cake into two congruent pieces so they each have the same amount of cake.



3. A quilt square is shown. This is the beginning of the pattern. Draw at least three different lines of symmetry that could be used in designing the quilt.



4. Juanita and Thomas were arguing about how many lines of symmetry there are in a pizza. Write a note to the two of them telling them how many lines of symmetry are in this round pizza.



_____

_____

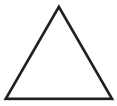
_____

Identify lines of symmetry in two-dimensional shapes

Math Test

Name _____

For Numbers 1 through 8, fill in the circle next to the number of lines of symmetry each figure has.

1. 

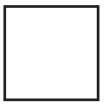
Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

2. 

Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

3. 

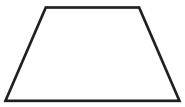
Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

4. 

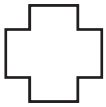
Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

5. 

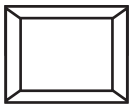
Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

6. 

Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

7. 

Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

8 

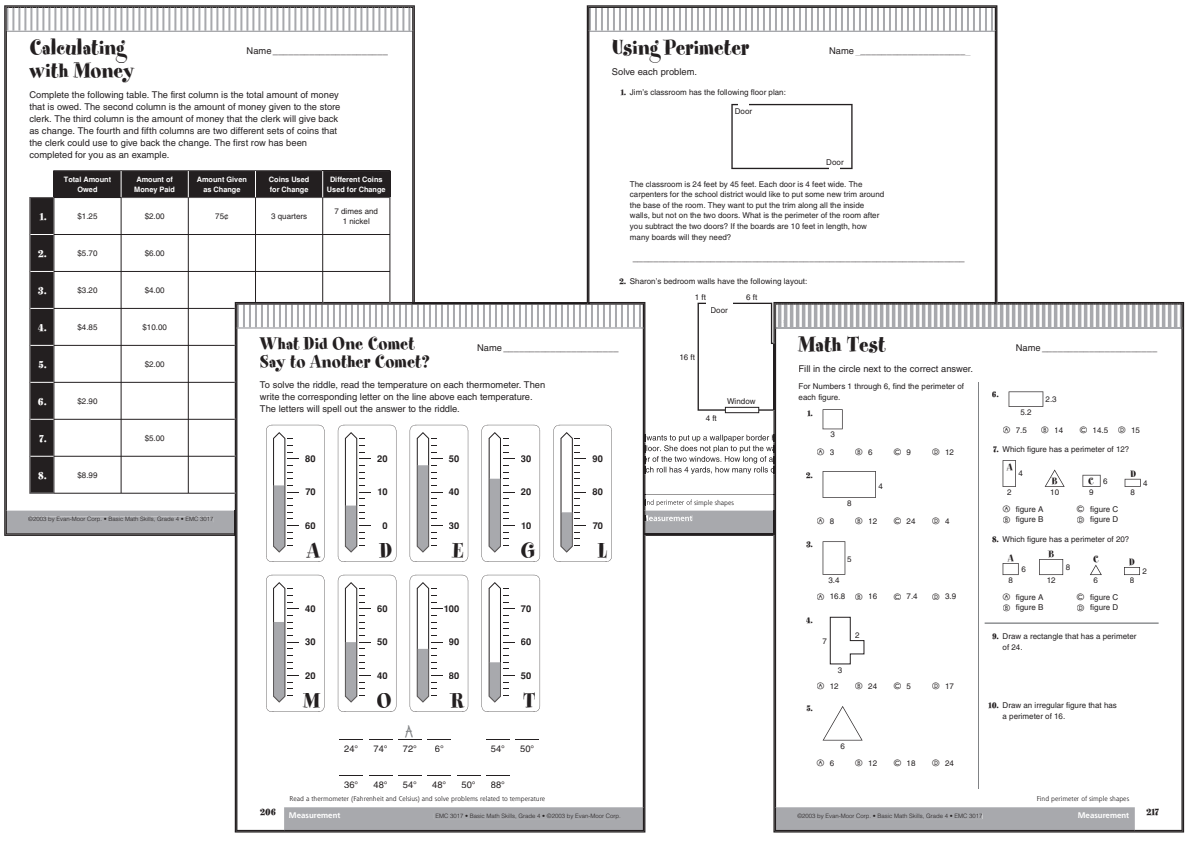
Ⓐ 1 Ⓒ 3
Ⓑ 2 Ⓓ 4

9. Draw a shape that has only one line of symmetry and draw the line of symmetry.

10. Draw a shape or figure that has more than 3 lines of symmetry and draw the lines of symmetry.

Identify lines of symmetry in two-dimensional shapes

Measurement



Calculating with Money

Name _____

Complete the following table. The first column is the total amount of money that is owed. The second column is the amount of money given to the store clerk. The third column is the amount of money that the clerk will give back as change. The fourth and fifth columns are two different sets of coins that the clerk could use to give back the change. The first row has been completed for you as an example.

	Total Amount Owed	Amount of Money Paid	Amount Given as Change	Coins Used for Change	Different Coins Used for Change
1.	$1.25	$2.00	75¢	3 quarters	7 dimes and 1 nickel
2.	$5.70	$6.00			
3.	$3.20	$4.00			
4.	$4.85	$10.00			
5.		$2.00			
6.	$2.90				
7.		$5.00			
8.	$8.99				

Using Perimeter

Name _____

Solve each problem.

1. Jim's classroom has the following floor plan:

Door

Door

The classroom is 24 feet by 45 feet. Each door is 4 feet wide. The carpenters for the school district would like to put some new trim around the base of the room. They want to put the trim along all the inside walls, but not on the two doors. What is the perimeter of the room after you subtract the two doors? If the boards are 10 feet in length, how many boards will they need?

_____

2. Sharon's bedroom walls have the following layout:

1 ft 6 ft

Door

16 ft

Window

4 ft

wants to put up a wallpaper border
oor. She does not plan to put the wi
of the two windows. How long of a
ch roll has 4 yards, how many rolls

nd perimeter of simple shapes

easurement

What Did One Comet Say to Another Comet?

Name _____

To solve the riddle, read the temperature on each thermometer. Then write the corresponding letter on the line above each temperature. The letters will spell out the answer to the riddle.

A	D	E	G	L
80 70 60	20 10 0	50 40 30	30 20 10	90 80 70

M	O	R	T
40 30 20	60 50 40	100 90 80	70 60 50

A

24° 74° 72° 6° 54° 50°

36° 48° 54° 48° 50° 88°

Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

206 Measurement EMC 3017 • Basic Math Skills, Grade 4 • ©2003 by Evan-Moor Corp.

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 6, find the perimeter of each figure.

1. 3
   Ⓐ 3 Ⓑ 6 Ⓒ 9 Ⓓ 12
2. 4 / 8
   Ⓐ 8 Ⓑ 12 Ⓒ 24 Ⓓ 4
3. 5 / 3.4
   Ⓐ 16.8 Ⓑ 16 Ⓒ 7.4 Ⓓ 3.9
4. 7, 2, 3
   Ⓐ 12 Ⓑ 24 Ⓒ 5 Ⓓ 17
5. 6
   Ⓐ 6 Ⓑ 12 Ⓒ 18 Ⓓ 24
6. 2.3 / 5.2
   Ⓐ 7.5 Ⓑ 14 Ⓒ 14.5 Ⓓ 15

7. Which figure has a perimeter of 12?
   A: 4, 2 B: 10 C: 6, 9 D: 4, 8
   Ⓐ figure A Ⓒ figure C Ⓑ figure B Ⓓ figure D

8. Which figure has a perimeter of 20?
   A: 6, 8 B: 8, 12 C: 6 D: 2, 8
   Ⓐ figure A Ⓒ figure C Ⓑ figure B Ⓓ figure D

9. Draw a rectangle that has a perimeter of 24.

10. Draw an irregular figure that has a perimeter of 16.

Find perimeter of simple shapes

 Measurement 217

Tongue Twister

Name _____

Write the letter for each set of coins on the line above the corresponding amount. Read the tongue twister and try to say it quickly three times.

A 

E 

O 

B 

G 

S 

C 

K 

U 

D 

L 

26¢	42¢	16¢	12¢	35¢		26¢	60¢	8¢	45¢
26¢	42¢	17¢	17¢	15¢		26¢	42¢	16¢	12¢	35¢
26¢	42¢	55¢	55¢	15¢					

Count mixed coins and compute change

What Is As Big As an Elephant and Weighs Nothing?

Name _____

Write the letter for each set of coins on the line above the corresponding amount. The letters will spell out the answer to the riddle.

A 

L 

S 

D 

N 

T 

E 

O 

W 

H 

P 

												,
18¢	22¢		27¢	36¢	27¢	11¢	7¢	18¢	22¢	3¢	8¢	

8¢	7¢	18¢	25¢	40¢	75¢

Count mixed coins and compute change

Making Change

Name _____

Complete the following table. The first column is the total amount of money that is owed. The second column is the amount of money given to the store clerk. The third column is the amount of money that the clerk will give back as change. (Some boxes may have more than one possible answer.)

	Total Amount Owed	Amount of Money Paid	Amount of Money Given as Change
1.	$7.48	$10.00	
2.	$12.53	$15.00	
3.	$24.89	$25.00	
4.	$7.93	$15.00	
5.	$6.25		$3.75
6.		$20.00	$2.17
7.	$6.31		
8.			$4.21

Count mixed coins and compute change

Calculating with Money

Name _____

Complete the following table. The first column is the total amount of money that is owed. The second column is the amount of money given to the store clerk. The third column is the amount of money that the clerk will give back as change. The fourth and fifth columns are two different sets of coins that the clerk could use to give back the change. The first row has been completed for you as an example.

	Total Amount Owed	Amount of Money Paid	Amount Given as Change	Coins Used for Change	Different Coins Used for Change
1.	$1.25	$2.00	75¢	3 quarters	7 dimes and 1 nickel
2.	$5.70	$6.00			
3.	$3.20	$4.00			
4.	$4.85	$10.00			
5.		$2.00		3 dimes and 1 nickel	
6.	$2.90			2 one-dollar bills and 1 dime	
7.		$5.00		1 dime, 1 nickel, and 3 pennies	
8.	$8.99			1 ten-dollar bill, 1 one-dollar bill, and 1 penny	

Count mixed coins and compute change

Using Money

Name _____

Solve each problem.

1. Gerald is buying some candy for $1.38. If he gives the clerk $2.00, how much change should he receive? What are two combinations of coins that the clerk could use to give Gerald his change? What is the fewest number of coins the clerk could use?

_____

_____

2. Tabitha is buying some CDs for her birthday. The total bill is $28.58. If she gives the clerk $30.00, how much change should she receive? If the clerk wants to use as few bills and coins as possible, what bills and coins should he select?

_____

3. In the General Store, there are many different candies to select from. Towers are 20¢, Smoths are 28¢, Grints are 37¢, Milts are 40¢, Jinxs are 43¢, and Poxes are 55¢. Robby bought the Smoths and Jinxs. He paid an additional 4¢ in tax. If he gave the clerk $5.00, what change did he receive?

_____

4. In the General Store listed in #3, Sally bought two different items and paid an additional 5¢ in tax. If she paid $1.00 and got 12¢ back in change, what two items could she have purchased? Explain your thinking and how you solved the problem.

_____

_____

5. Samantha has 58¢ in her pocket. What are four different combinations of coins that she could have that each total 58¢?

_____

Count mixed coins and compute change

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, find the value of each set of coins.

1. 

Ⓐ 75¢ Ⓒ 20¢
Ⓑ 95¢ Ⓓ 65¢

2. 

Ⓐ 48¢ Ⓒ 47¢
Ⓑ 45¢ Ⓓ 46¢

3. 

Ⓐ 22¢ Ⓒ 20¢
Ⓑ 12¢ Ⓓ 30¢

4. 

Ⓐ 46¢ Ⓒ 41¢
Ⓑ 36¢ Ⓓ 31¢

5. Jack owed $2.74 and paid $3.00. How much change should he get?

Ⓐ $1.26 Ⓒ 26¢
Ⓑ $1.16 Ⓓ 16¢

6. Jill owed $3.29 and paid $5.00. How much change should she get?

Ⓐ $1.71 Ⓒ $1.81
Ⓑ $2.71 Ⓓ $2.81

7. Which set of coins total 50¢?

Ⓐ Ⓑ Ⓒ all of these Ⓓ

8. Which set of coins total $1.25?

Ⓐ Ⓑ Ⓒ Ⓓ

9. What are the fewest coins you can use to make 74¢?

_____

10. What are two different sets of coins that each total 27¢?

_____

Count mixed coins and compute change

What Does a Cat Call a Boo-Boo?

Name _____

To find the answer to the riddle, put the following metric units of measurement in order from smallest to largest. Then write the letters following each unit of measure in the same order and they will spell out the answer.

hectometer	I	centimeter	M
meter	O	kilometer	E
millimeter	A	dekameter	W
decimeter	E		

smallest

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

largest

Identify and order metric measurements

Riddle

Name _____

To find the answer to the riddle, put the following metric units of measurement in order from smallest to largest. Then write the letters following each unit of measurement in the same order and they will spell out the answer.

kiloliter	E	milliliter	A
liter	A	deciliter	E
centiliter	B	dekaliter	G
hectoliter	L		

What do you get when you cross a bee and a seagull?

smallest

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

largest

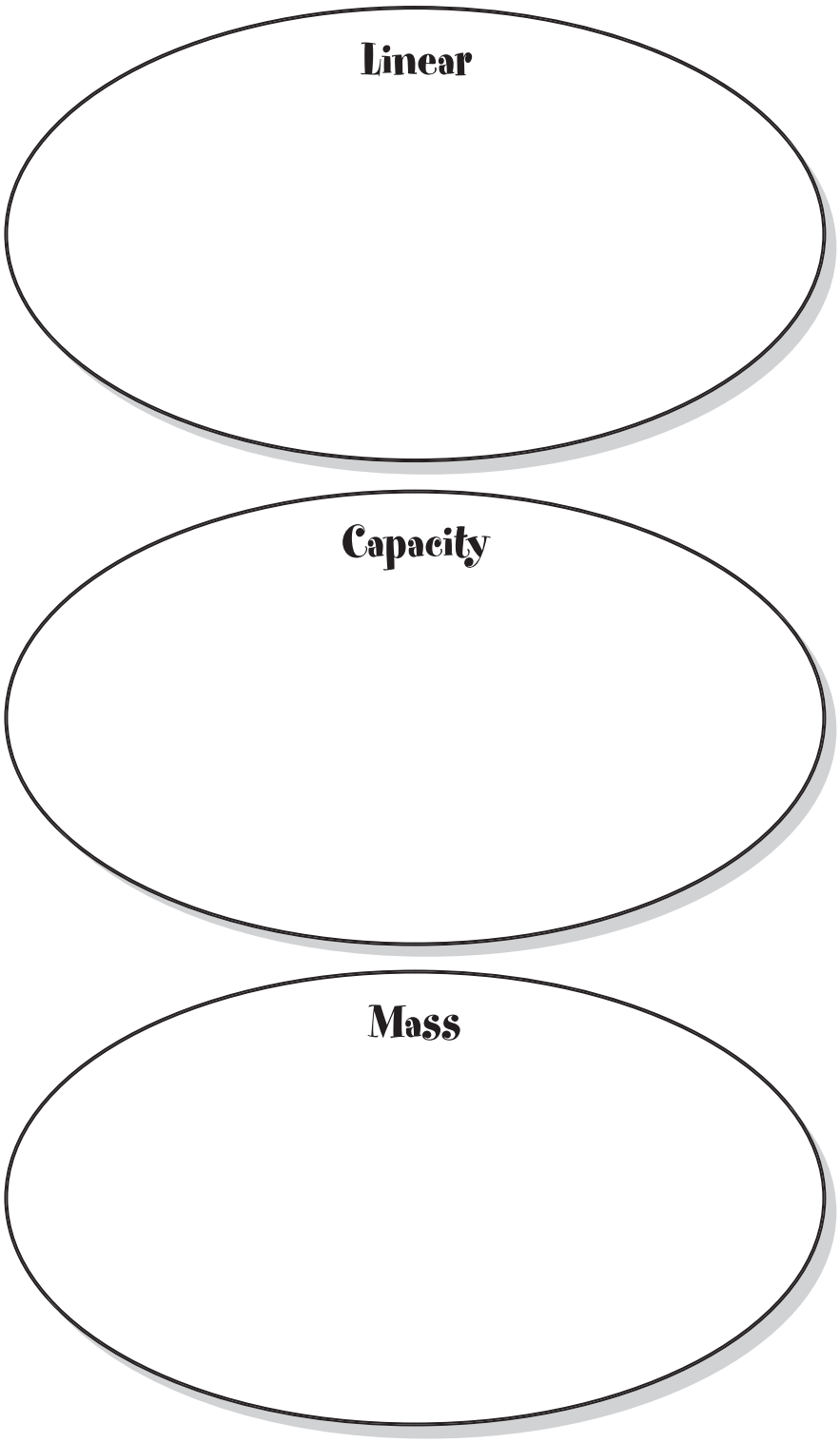
Identify and order metric measurements

Sort the Units

Name _____

Below are three groups of metric units of measure that are all mixed up.
Write the names of the measurement units in the correct circle.

decimeter
centiliter
centigram
kiloliter
liter
millimeter
deciliter
kilometer
meter
milligram
gram
decigram
kilogram
milliliter
centimeter



Identify and order metric measurements

Sort and Order

Name _____

Below are three groups of metric units of measure that are all mixed up. First, identify the linear units, the capacity units, and the mass units. Then, within each of these groups, list them in order from smallest to largest under the appropriate heading.

liter	decimeter	milligram
millimeter	centiliter	kiloliter
deciliter	centigram	kilogram
meter	kilometer	milliliter
decigram	gram	centimeter

Linear	Capacity	Mass
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Identify and order metric measurements

Using Metric Measures

Name _____

Solve each problem.

1. Mrs. Johnson needs your help. She has several measuring instruments, but the labels all came off. She has one that measures length, and it is a little longer than a yardstick. Another one measures weight similar to a few pennies. A third one measures capacity and is slightly larger than a half-gallon pitcher.

Help her label each with an appropriate unit of measure.

_____

_____

_____

2. Charlie has several pieces of string and needs help putting them in order. They are the following lengths:

1 meter
1 millimeter
1 centimeter
1 kilometer
1 decimeter

List them in order from smallest to largest.

_____

_____

_____

_____

_____

3. George can't keep track of which units are used for measuring distance and which are used for measuring mass. He has this list in front of him:

dekagram
meter
decigram
decimeter
centigram
kilometer
meter
milligram

Write a note to George and help him decide which are used for distance and which are used for mass. Include in this note a hint or two that will help him keep this straight in the future.

_____

_____

_____

_____

_____

Identify and order metric measurements

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Which of the following is used to measure weight?

Ⓐ kiloliter
Ⓑ decimeter
Ⓒ milligram
Ⓓ kilometer

2. Which of the following is used to measure capacity?

Ⓐ liter
Ⓑ gram
Ⓒ meter
Ⓓ yard

3. Which of the following is used to measure length?

Ⓐ milliliter
Ⓑ kilogram
Ⓒ decimeter
Ⓓ centigram

4. Which of these is longer than a meter?

Ⓐ millimeter
Ⓑ kilometer
Ⓒ decimeter
Ⓓ centimeter

5. Which of these is heavier than a gram?

Ⓐ kilogram
Ⓑ milligram
Ⓒ decigram
Ⓓ centigram

6. Which of these is more than a liter?

Ⓐ milliliter
Ⓑ deciliter
Ⓒ kiloliter
Ⓓ centiliter

7. Which of these is about the length of a yardstick?

Ⓐ 1 kilometer
Ⓑ 1 centimeter
Ⓒ 1 millimeter
Ⓓ 1 meter

8. Which of these is about the capacity of a pitcher of water?

Ⓐ 1 liter
Ⓑ 1 kiloliter
Ⓒ 1 centiliter
Ⓓ 1 milliliter

9. List these measures of capacity in order from smallest to largest:

kiloliter, liter, milliliter, deciliter, centiliter

_____ _____

_____ _____

_____

10. Which of these does NOT belong in this group?

kilometer, meter, millimeter, meteor, centimeter

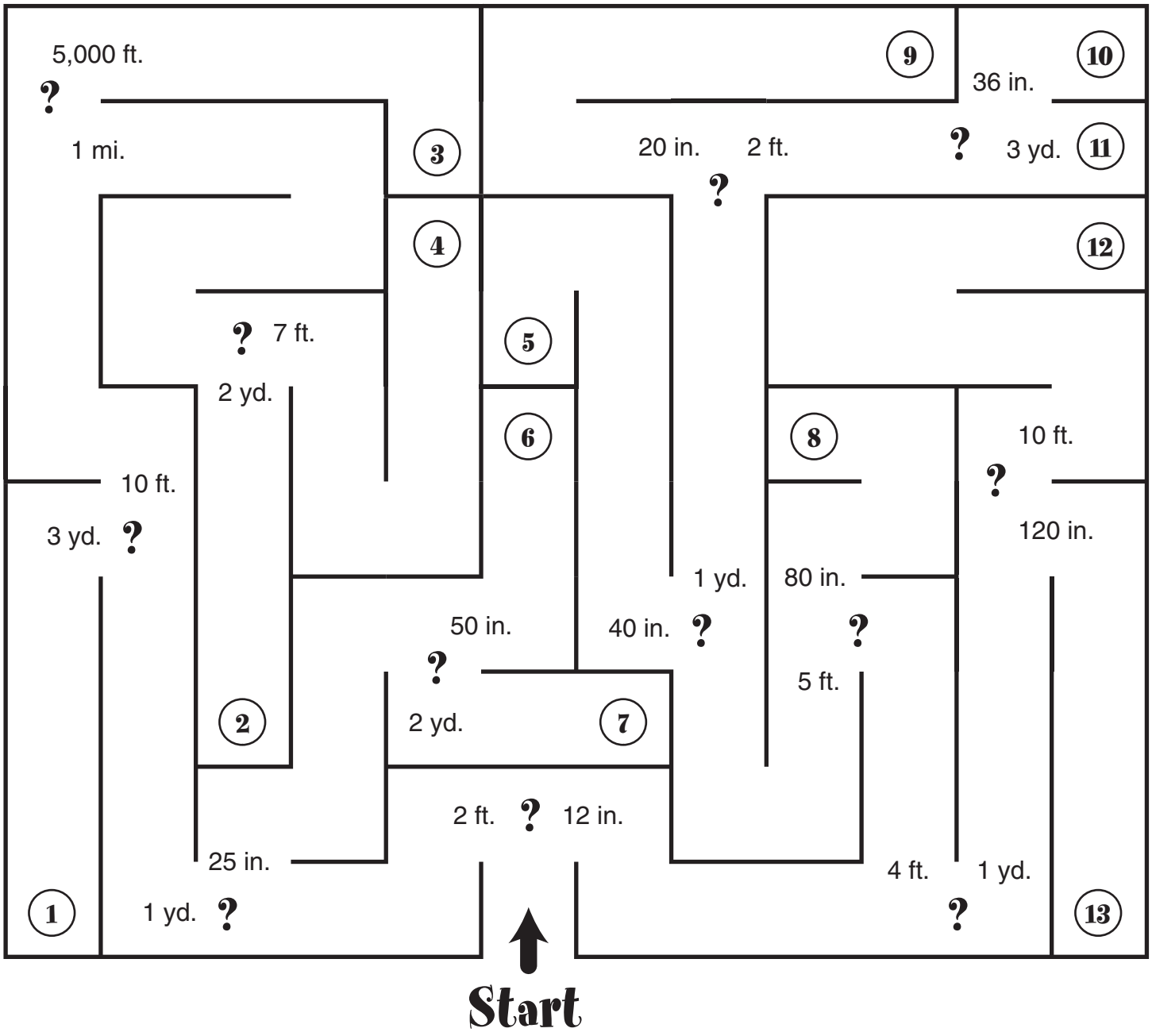
_____

Identify and order metric measurements

Comparing Measures

Name _____

At each question mark, circle the larger measure. Then follow the path with the larger measure through the maze.



What number was at the end of your path? _____

Compare and use customary and metric units of linear measurement

Secret Message

Name _____

Write the symbol **<** or **>** in each blank to make a true statement. Then circle the letter under that symbol. The circled letters will spell out a secret message for you when read from top to bottom.

	<	>
200 centimeters _____ 3 meters	Y	S
1 meter _____ 500 millimeters	A	O
20 centimeters _____ 20 millimeters	I	U
500 millimeters _____ 1 meter	A	E
11 decimeters _____ 1 meter	S	R
1 kilometer _____ 2,000 meters	E	U
5 millimeters _____ 1 centimeter	A	Y
2 meters _____ 15 decimeters	R	S
10 decimeter _____ 2 meters	T	D
100 centimeters ___ 100 millimeters	U	A
150 centimeters _____ 2 meters	R	V

What is the Secret Message?

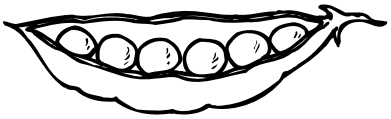
_____

Compare and use customary and metric units of linear measurement

Measure It

Name _____

You will need an inch ruler for this page. Measure each object to the nearest quarter inch (in.).

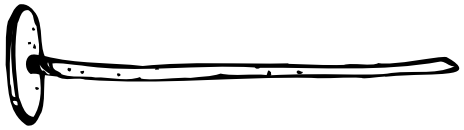
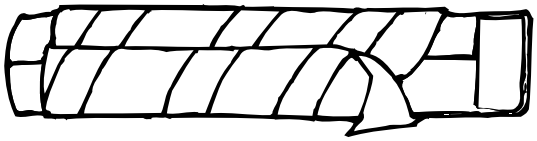
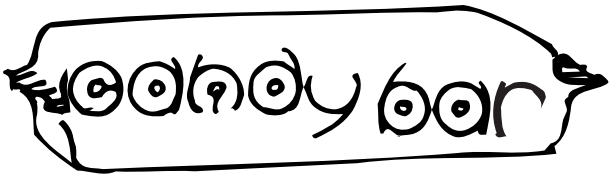
Object	Length
1. 	_____ in.
2. 	_____ in.
3. 	_____ in.
4. 	_____ in.
5. 	_____ in.
6. 	_____ in.

Compare and use customary and metric units of linear measurement

Use a Metric Ruler

Name _____

You will need a centimeter ruler for this page. Measure each object to the nearest half centimeter (cm).

Object	Length
1. 	_____ cm
2. 	_____ cm
3. 	_____ cm
4. 	_____ cm
5. 	_____ cm
6. 	_____ cm

Compare and use customary and metric units of linear measurement

Using Linear Measurement

Name _____

Solve each problem.

1. Frankie got to choose the piece of licorice that he wanted from his teacher. One piece is 18 centimeters in length, and the other one is 3 decimeters in length. Which one should he choose in order to get the longer piece? Why?

_____

_____

2. The lumber store is selling boards of varying length, each for $2.00. One is 3 meters in length, while another one is 240 centimeters in length. If we want the longer one, which one should we select? Why?

_____

_____

3. At the fabric store, there were two pieces of cloth that were each $3. Alex didn't care what color of fabric he got, so he wanted the longer piece. The purple fabric was 60 inches. The green fabric was 2 yards. Which one should Alex select and why?

_____

_____

4. Amber and her dad were putting in a sprinkler system, and they could buy two different rolls of pipe for the same price. The first roll had $\frac{1}{2}$ kilometer of pipe, while the second roll had 420 meters of pipe. Which roll gives Amber and her dad the longer piece of pipe? Why?

_____

Compare and use customary and metric units of linear measurement

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 5, use a ruler to measure each line to the nearest half centimeter.

1. 

Ⓐ 5 cm
Ⓑ 7 cm
Ⓒ 3 cm
Ⓓ 1 cm

2. 

Ⓐ 2.5 cm
Ⓑ 5 cm
Ⓒ 1.5 cm
Ⓓ 3 cm

3. 

Ⓐ 1 cm
Ⓑ 2 cm
Ⓒ 3 cm
Ⓓ 4 cm

4. 

Ⓐ 4 cm
Ⓑ 3.5 cm
Ⓒ 3 cm
Ⓓ 1.5 cm

5. 

Ⓐ 3 cm
Ⓑ 4 cm
Ⓒ 2 cm
Ⓓ 1 cm

6. Which of these is longer than a foot?

Ⓐ 15 inches
Ⓑ 8 inches
Ⓒ 1 inch
Ⓓ 10 inches

7. Which of these is equal to a yard?

Ⓐ 24 inches
Ⓑ 2 feet
Ⓒ 30 inches
Ⓓ 3 feet

8. Which of these is NOT a true sentence?

Ⓐ 1 mile > 5,000 feet
Ⓑ 8 yards < 20 feet
Ⓒ 2 feet = 24 inches
Ⓓ 2 yards < 100 inches

9. Which is longer, 3 yards of string or 16 feet? Justify your answer.

_____

_____

_____

_____

10. Which is shorter, 2 meters of tape or 250 centimeters? Justify your answer.

_____

_____

_____

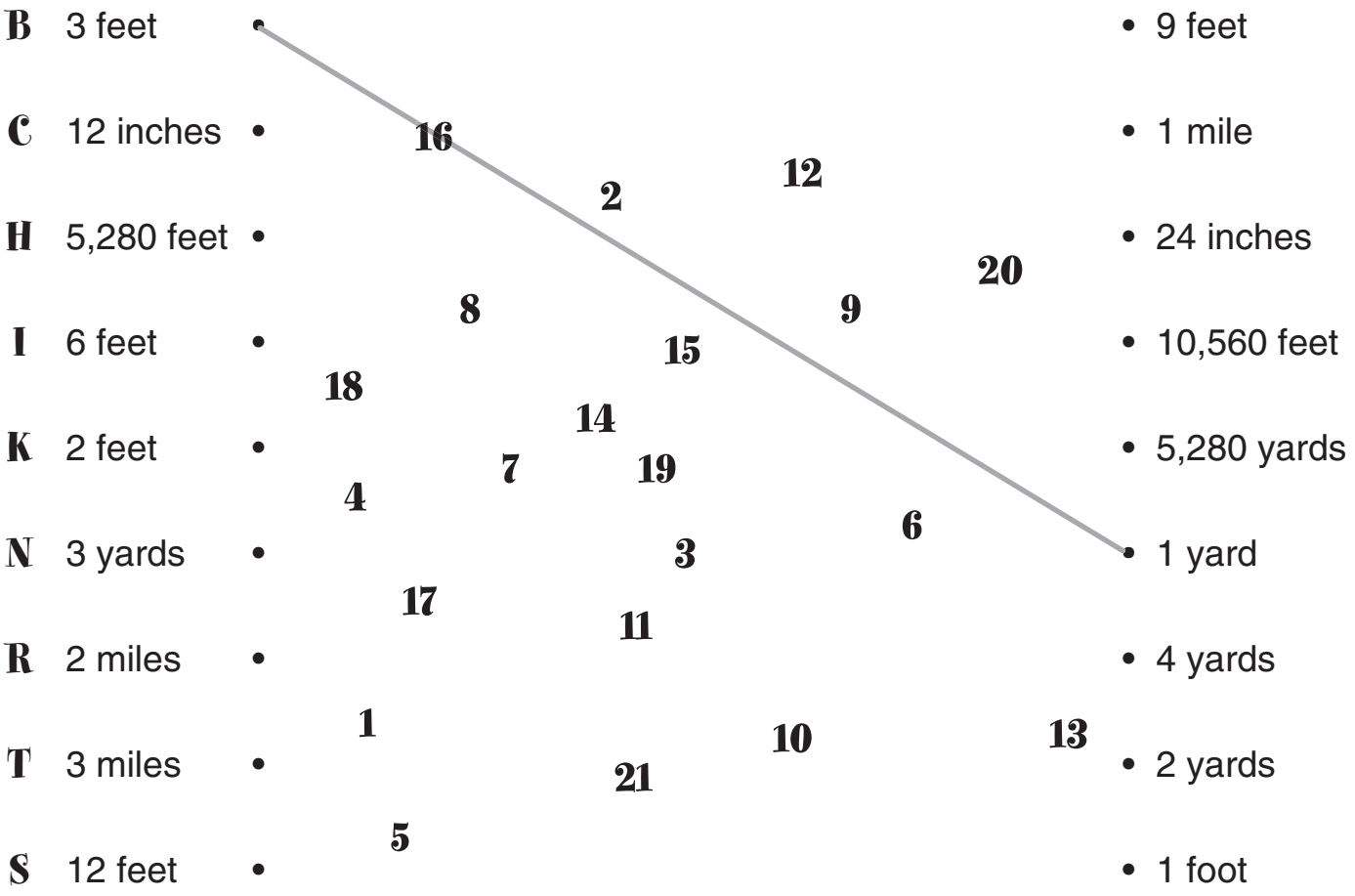
_____

Compare and use customary and metric units of linear measurement

Tongue Twister

Name _____

Draw a straight line from the measurement on the left to the equivalent measurement on the right. Each line will go through one or more numbers. At the bottom of the page, write the corresponding letter on the line above each number. The letters will spell out a tongue twister. Try to say it fast three times.



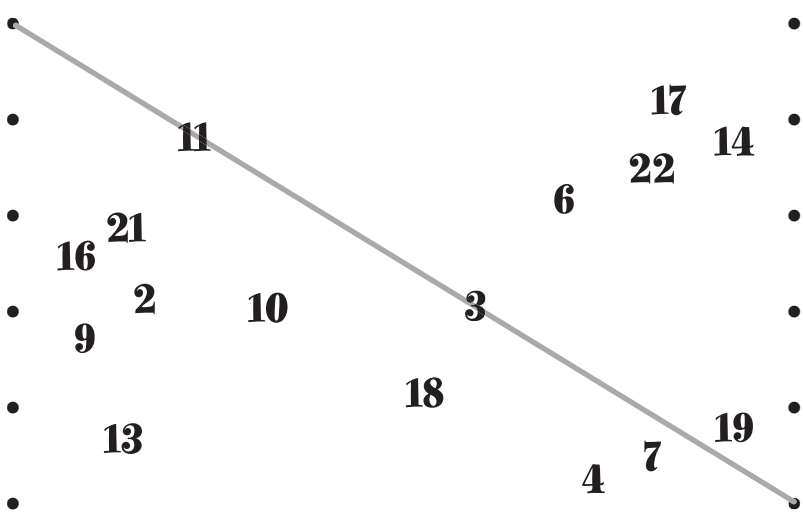
1	2	3	4		5	6	7	8	9	10	
						B					
11	12	13	14	15		16	17	18	19	20	21

Find conversions between units within a system of linear measurement

Tongue Twister

Name _____

Draw a straight line from the measurement on the left to the equivalent measurement on the right. Each line will go through one or more numbers. At the bottom of the page, write the corresponding letter on the line above each number. The letters will spell out a tongue twister. Try to say it fast three times.



E	1 meter	• 2,000 meters
G	1 centimeter	• 1,000 meters
H	2 meters	• 50 millimeters
I	1 dekameter	• 10 centimeters
N	1 kilometer	• 20 millimeters
O	2 kilometers	• 100 centimeters
P	5 centimeters	• 10 meters
S	2 centimeters	• 2,000 millimeters
T	1 decimeter	• 3 centimeters
U	30 millimeters	• 10 millimeters

		E																				
1	2	3		4	5	6																
				E																		
7	8	9	10	11	12		13	14														
15	16	17	18		19	20	21	22	23													

Find conversions between units within a system of linear measurement

Order the Units

Name _____

1. Write the following units of metric measure in order from largest to smallest.

largest

decimeter _____

meter _____

dekameter _____

centimeter _____

millimeter _____

kilometer _____

hectometer _____

smallest

Use the list you have just completed to answer these questions.

2. 1 meter = _____ centimeters

3. 1 meter = _____ decimeters

4. 1 kilometer = _____ meters

5. 1 meter = _____ millimeters

6. 1 hectometer = _____ meters

7. 1 dekameter = _____ meters

Find conversions between units within a system of linear measurement

Equivalent Measures

Name _____

1. Write the following units of measure in order from largest to smallest.

largest

foot _____

mile _____

yard _____

inch _____

smallest

Complete each of the following to make a true statement.

2. 1 yard = _____ feet

3. 1 foot = _____ inches

4. 1 mile = _____ feet

5. 1 yard = _____ inches

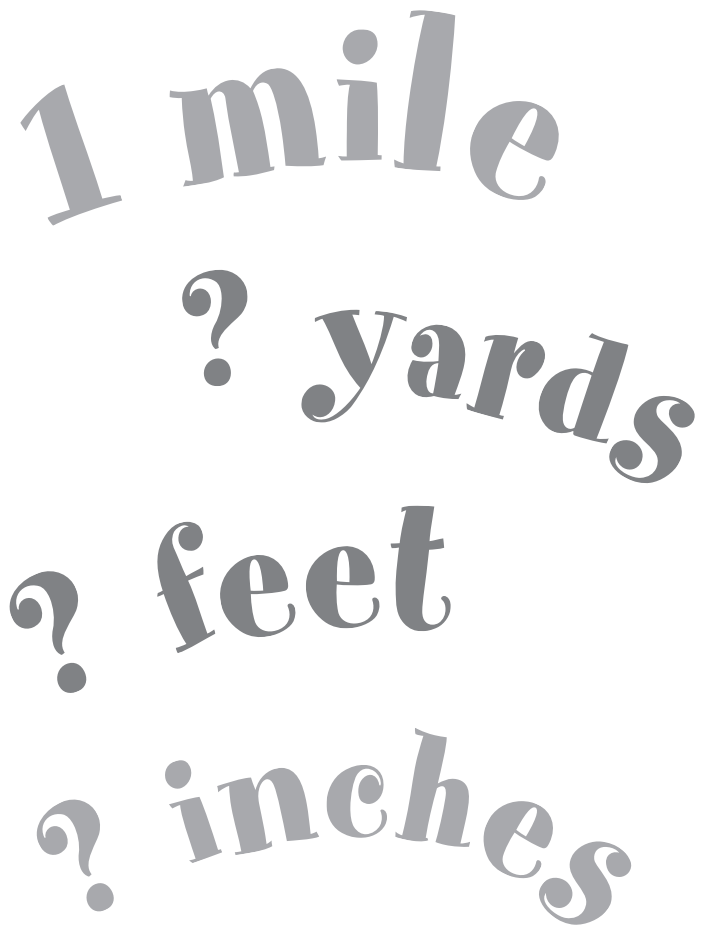
6. 2 feet = _____ inches

7. 7 yards = _____ feet

8. 2 miles = _____ feet

9. 5 feet = _____ inches

10. 10 yards = _____ inches



Find conversions between units within a system of linear measurement

Using Conversions

Name _____

Solve each problem.

1. James was building a tree house and needed a board that was at least 28 inches long. His mom said she had a board that was 3 feet long. Is it long enough? Justify your answer.

_____

_____

2. Hillary was driving through the city of Denver, Colorado, when she saw a sign referring to it as being the "Mile High City." What is the elevation of Denver in feet?

_____

3. A roll of transparent tape is approximately 20 meters long. Is there enough tape to go across each face of a cube twice if the cube is 25 centimeters across each face? Justify your answer.

_____

_____

4. Jordi is always getting mixed up about which is larger, the decimeter or the dekameter. Write a note to Jordi telling him some way that he can keep them straight.

_____

_____

_____

Find conversions between units within a system of linear measurement

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 3 feet equals _____.

Ⓐ 1 yard
Ⓑ 1 inch
Ⓒ 12 inches
Ⓓ 9 yards

2. 12 inches equals _____.

Ⓐ 1 mile
Ⓑ 1 yard
Ⓒ 1 foot
Ⓓ 1 meter

3. 1 mile equals _____.

Ⓐ 24 feet
Ⓑ 40 feet
Ⓒ 5,000 feet
Ⓓ 5,280 feet

4. 6 feet equals _____.

Ⓐ 60 inches
Ⓑ 3 yards
Ⓒ 72 inches
Ⓓ 4 yards

5. 1 meter equals _____.

Ⓐ 1,000 decimeters
Ⓑ 1,000 centimeters
Ⓒ 1,000 kilometers
Ⓓ 1,000 millimeters

6. 100 centimeters equals _____.

Ⓐ 1 millimeter
Ⓑ 1 centimeter
Ⓒ 1 meter
Ⓓ 1 kilometer

7. 1 kilometer equals _____.

Ⓐ 1,000 centimeters
Ⓑ 1,000 decimeters
Ⓒ 1,000 millimeters
Ⓓ 1,000 meters

8. 1,000 millimeters equals _____.

Ⓐ 1 meter
Ⓑ 1 decimeter
Ⓒ 1 centimeter
Ⓓ 1 kilometer

9. What are two units of measure that are equivalent to 1 meter?

_____

_____

10. What are two units of measure that are equivalent to 3 feet?

_____

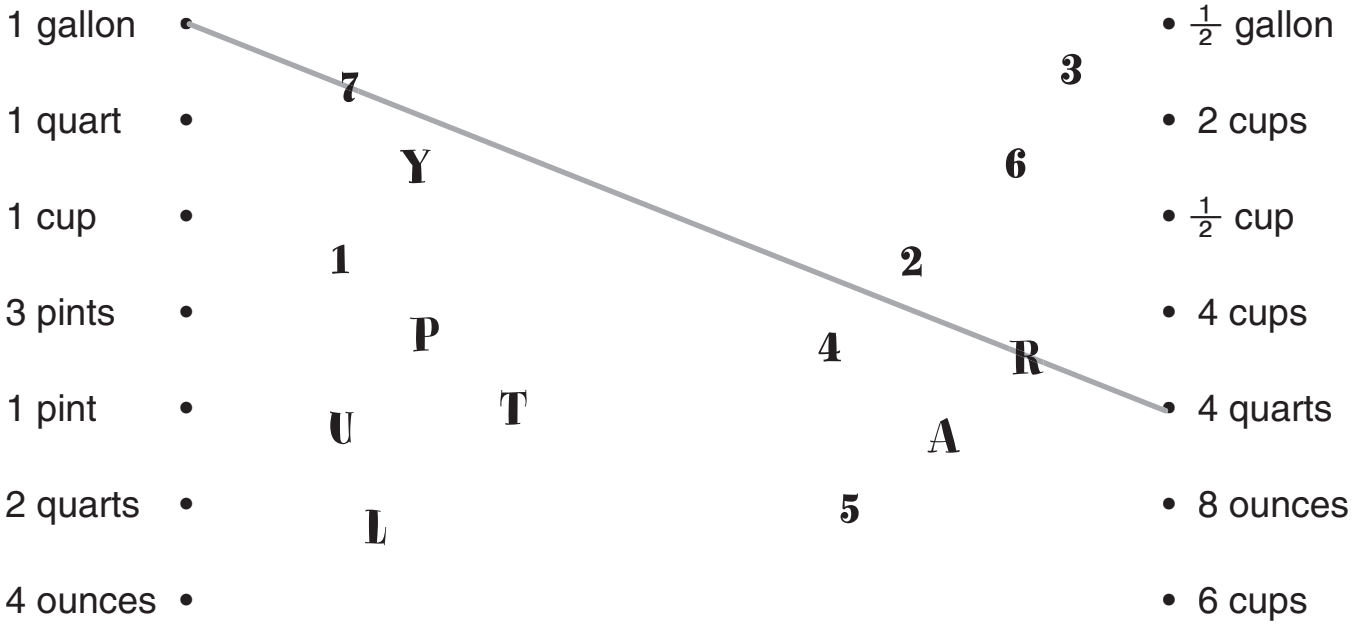
_____

Find conversions between units within a system of linear measurement

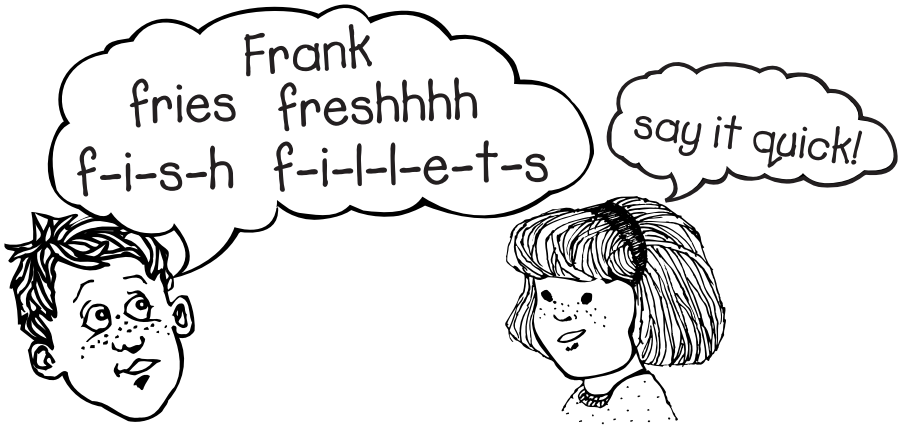
Tongue Twister

Name _____

Match each measurement on the left with an equivalent measurement on the right and connect these with a straight line. Each line will pass through a number and a letter. At the bottom of the page, write the letter above each corresponding number. Read the tongue twister and try to say it quickly three times.



	R								R		
5	7	3	4	2	6	4	3	7	1	4	

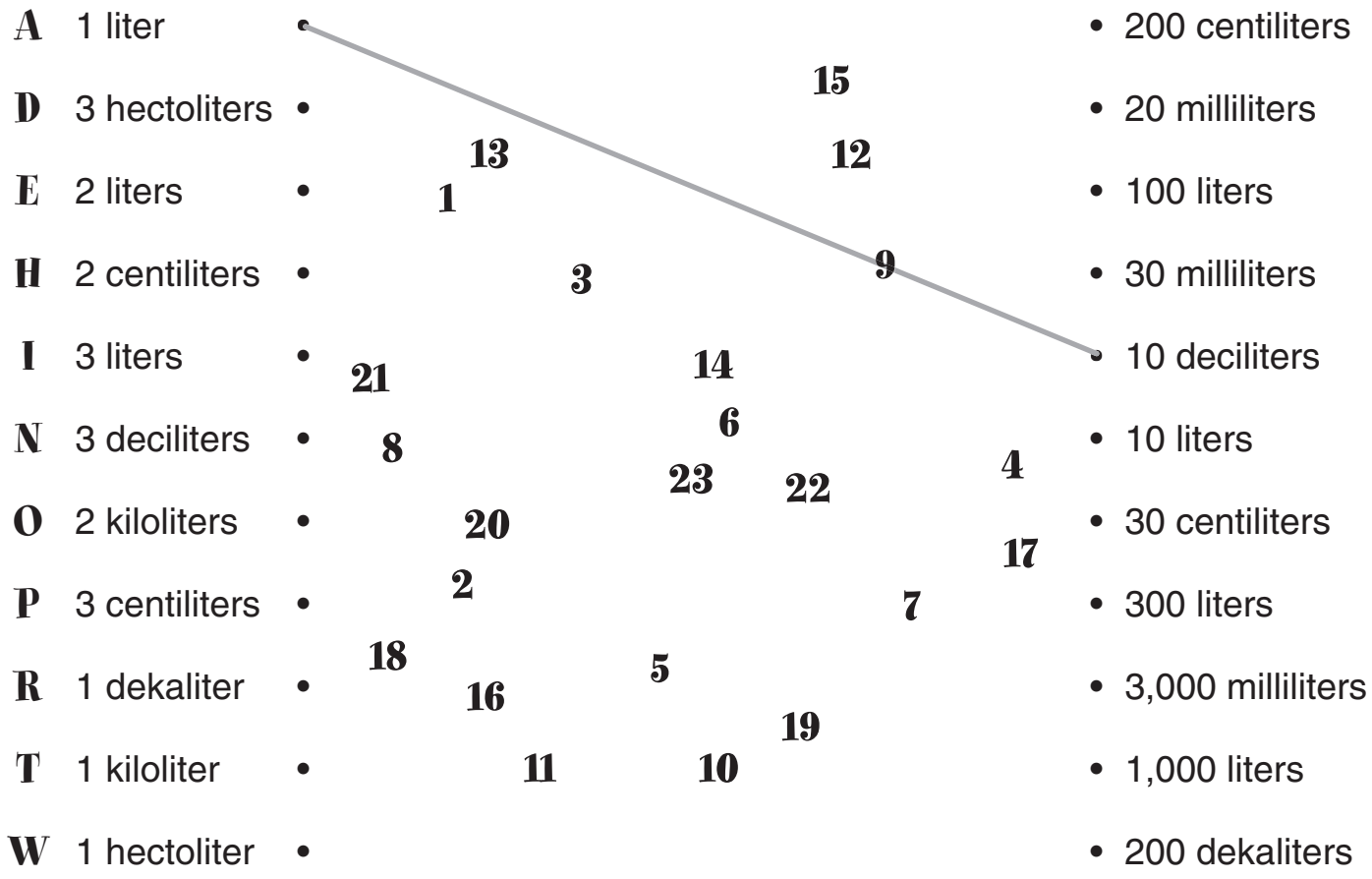


Identify and compare customary and metric units of capacity

Tongue Twister

Name _____

Match each measurement on the left with an equivalent measurement on the right and connect these with a straight line. Each line will pass through a number and a letter. At the bottom of the page, write the letter above each corresponding number. Read the tongue twister and try to say it quickly three times.



1	2						3	4	5	6							7	8					
A																							
9	10						11	12	13														
14	15	16					17	18	19	20							21	22	23				

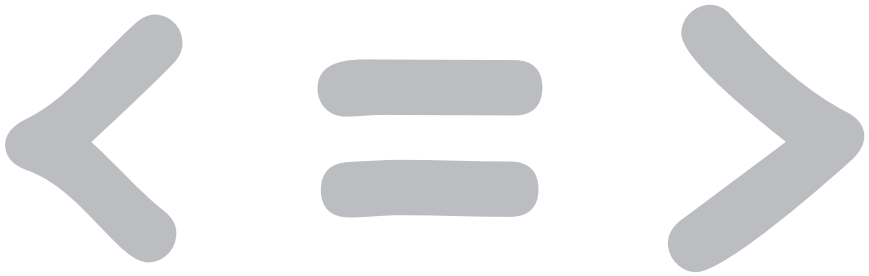
Identify and compare customary and metric units of capacity

Compare the Measurements

Name _____

Complete each sentence with **<**, **>**, or **=**.

1. 1 gallon _____ 1 quart
2. 1 cup _____ 1 gallon
3. 1 pint _____ 1 cup
4. 8 ounces _____ 1 cup
5. 16 ounces _____ 1 quart
6. 1 gallon _____ 1 ounce
7. 2 quarts _____ 8 cups
8. 4 cups _____ 1 gallon
9. 1 gallon _____ 4 pints
10. 1 pint _____ 2 cups



Identify and compare customary and metric units of capacity

Compare Metric Measures

Name _____

Complete each sentence with **<**, **>**, or **=**.

1. 1 liter _____ 1 milliliter

2. 1 centiliter _____ 1 milliliter

3. 1 kiloliter _____ 1 liter

4. 1 hectoliter _____ 1 centiliter

5. 1 deciliter _____ 1 kiloliter

6. 1 milliliter _____ 1 centiliter

7. 1 centiliter _____ 1 liter

8. 1 dekaliter _____ 1 milliliter

9. 1 deciliter _____ 1 liter

10. 1 hectoliter _____ 1 liter

Identify and compare customary and metric units of capacity

Using Capacity

Name _____

Solve each problem.

1. Eric was looking in the refrigerator and saw two pitchers of punch. He wanted to combine them into a single 2-quart pitcher, but didn't know if the pitcher was big enough. The first small pitcher holds 1 quart, and it was half full. The other pitcher holds 2 quarts, and it was about three-fourths full. Can Eric pour the remaining punch from the smaller pitcher into the larger one without overflowing the pitcher?

_____

2. Use the following table of conversions to complete this task:

1 cup = 8 ounces
1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts

Julie is doing some baking. Her recipe calls for 2 pints of one ingredient, 3 cups of another ingredient, 4 ounces of another, and $1\frac{1}{2}$ cups of another ingredient. Once she combines all of these ingredients, will they fit in her 2-quart mixing bowl?

_____

3. Heidi has 20 dekaliters of oil in one barrel and 150 liters of oil in another barrel. Which barrel has more oil?

_____

4. Patricia uses 5 milliliters of dye for 2 liters of water. If she is mixing up 10 liters of water, how many milliliters of dye does she need?

_____

Identify and compare customary and metric units of capacity

Math Test

Name _____

Fill in the circle next to the correct answer.

1. 1 quart = _____

Ⓐ 4 cups

Ⓑ 2 pints

Ⓒ $\frac{1}{4}$ gallon

Ⓓ all of the above

2. 1 cup = _____

Ⓐ $\frac{1}{2}$ pint

Ⓑ 16 ounces

Ⓒ $\frac{1}{2}$ quart

Ⓓ none of the above

3. 1 liter = _____

Ⓐ 10 centiliters

Ⓑ 100 milliliters

Ⓒ 10 deciliters

Ⓓ 10 hectoliters

4. 1 centiliter = _____

Ⓐ $\frac{1}{100}$ liter

Ⓑ 1 milliliter

Ⓒ 10 liters

Ⓓ 10 kiloliters

5. 1 quart < _____

Ⓐ 2 cups

Ⓑ 1 ounce

Ⓒ 1 pint

Ⓓ 1 gallon

6. 1 cup > _____

Ⓐ 4 ounces

Ⓑ 1 pint

Ⓒ 2 quarts

Ⓓ 1 gallon

7. 1 liter < _____

Ⓐ 1 centiliter

Ⓑ 1 hectoliter

Ⓒ 10 milliliters

Ⓓ 1 deciliter

8. 1 deciliter > _____

Ⓐ 1 liter

Ⓑ 2 dekaliters

Ⓒ 1 centiliter

Ⓓ 1 kiloliter

9. Jared wants to put 2 quarts of punch into 4-ounce popsicle holders. How many popsicles will he be able to make from the 2 quarts of punch?

_____

10. Nancy has 25 milliliters of soap in a bottle. In another bottle, she has 8 centiliters of soap. Can she put them together in a 1-deciliter bottle? Justify your answer.

_____

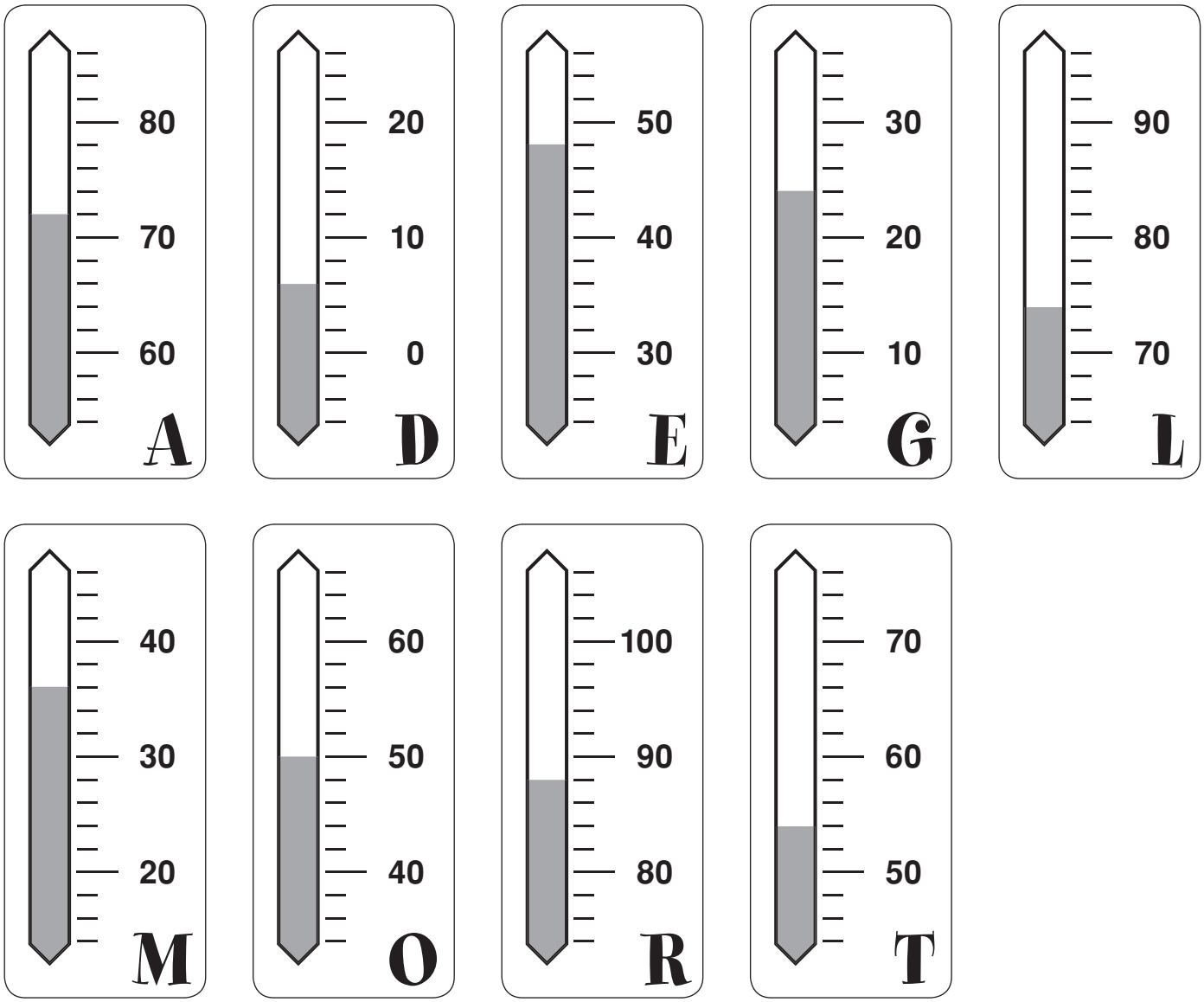
_____

Identify and compare customary and metric units of capacity

What Did One Comet Say to Another Comet?

Name _____

To solve the riddle, read the temperature on each thermometer. Then write the corresponding letter on the line above each temperature. The letters will spell out the answer to the riddle. Be sure to notice the scale used on each thermometer.



		A				
24°	74°	72°	6°		54°	50°

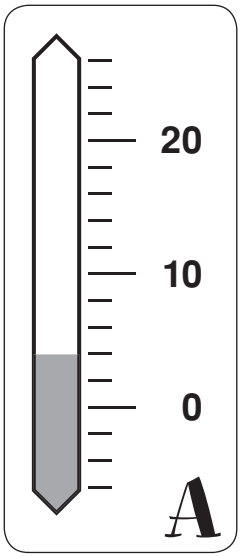
36°	48°	54°	48°	50°	88°

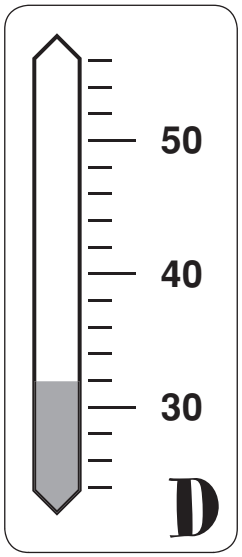
Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

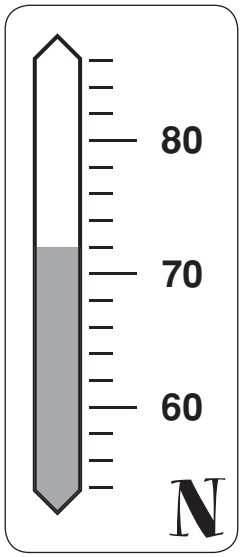
Riddle

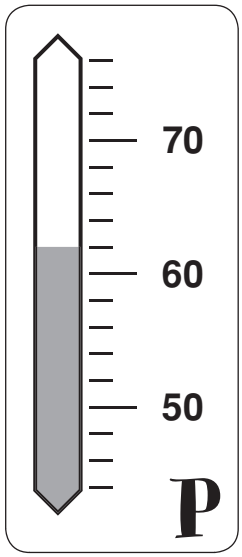
Name _____

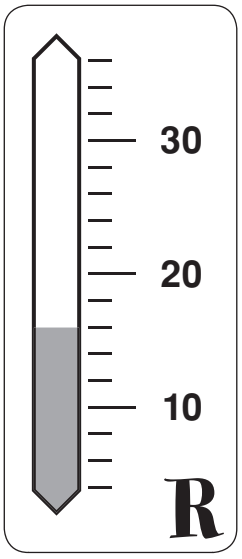
To solve the riddle, read the temperature on each thermometer. Then write the corresponding letter on the line above each temperature. The letters will spell out the answer to the riddle. Be sure to notice the scale used on each thermometer.

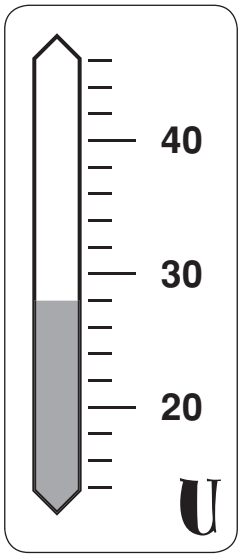


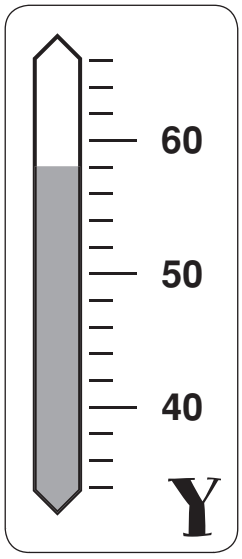












What is the best thing to do when an elephant charges?

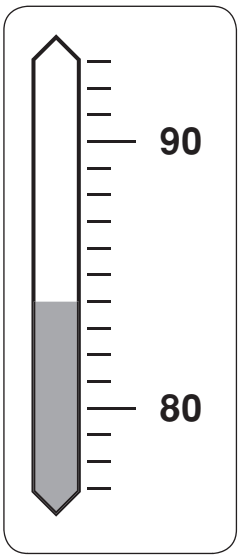
	A			A							
62°	4°	58°		4°	72°	32°		16°	28°	72°	

Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

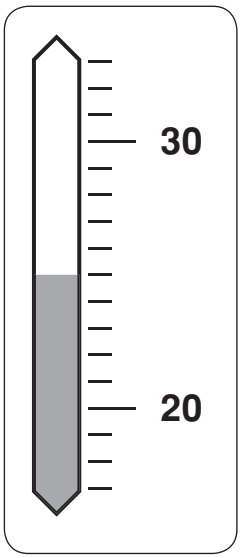
What's the Temperature?

Name _____

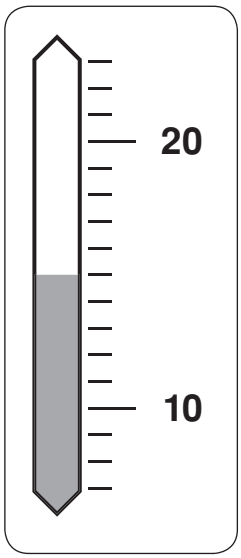
Write the temperature shown on each thermometer. Be sure to notice the scale used on each thermometer.



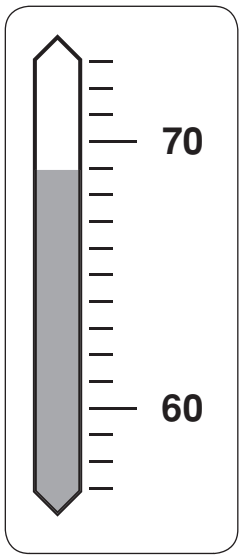
1. _____



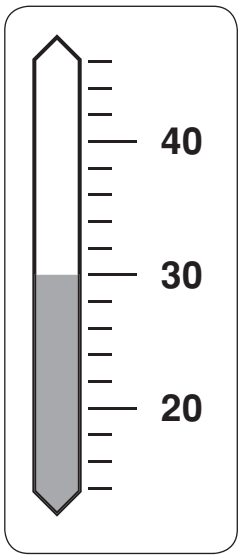
2. _____



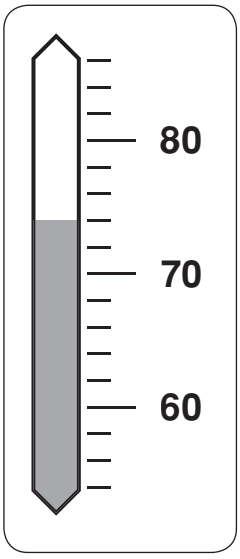
3. _____



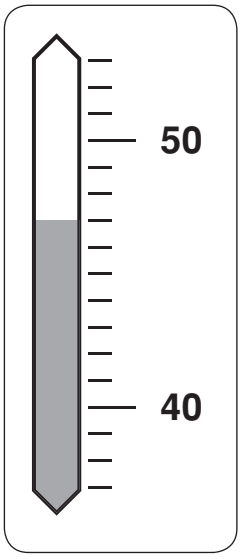
4. _____



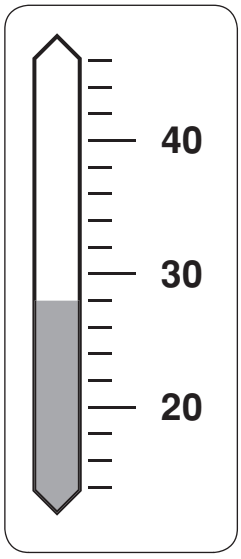
5. _____



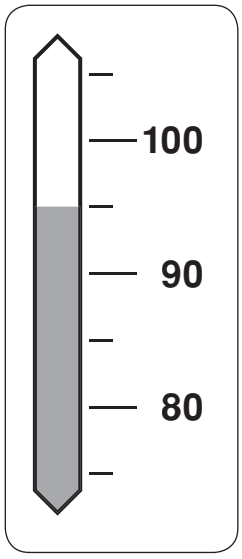
6. _____



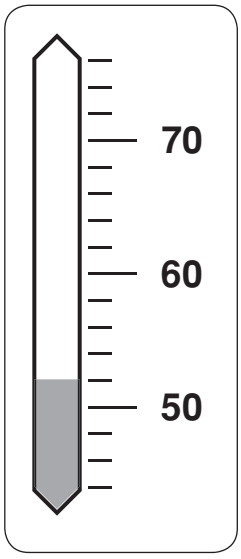
7. _____



8. _____



9. _____



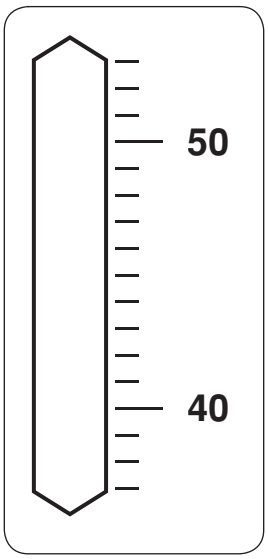
10. _____

Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

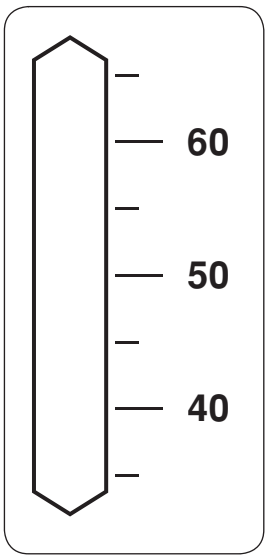
Temperature

Name _____

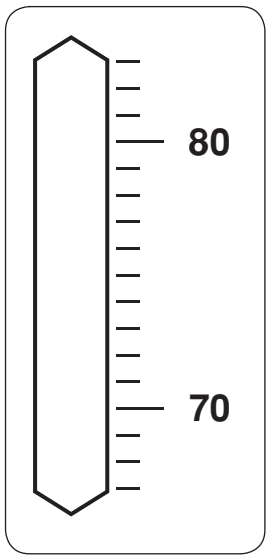
Color each thermometer to show the temperature listed. Be sure to notice the scale used on each thermometer.



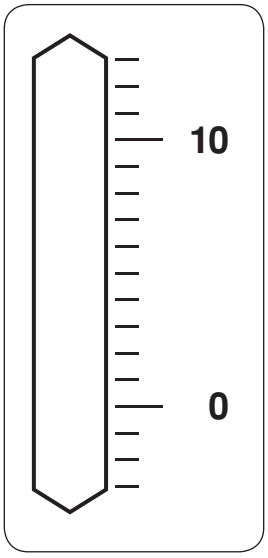
1. 48°



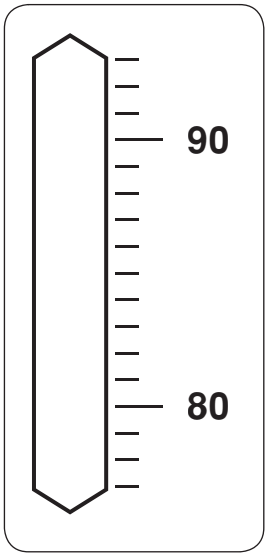
2. 55°



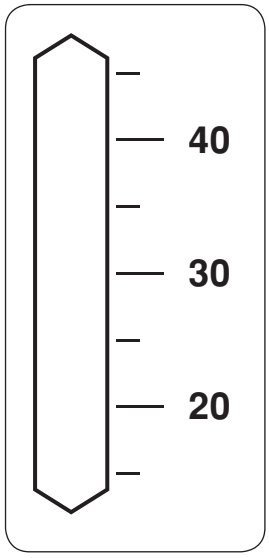
3. 72°



4. 4°



5. 81°



6. 35°

Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

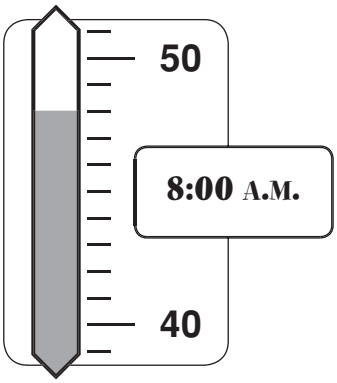
Using Temperature

Name _____

Solve each problem.

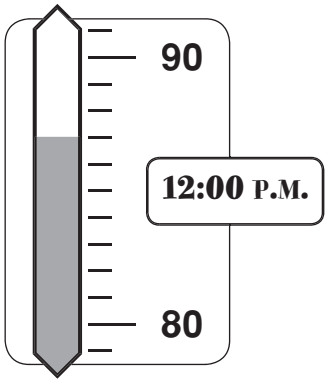
1. Mr. Smith's class was given the task of recording the outside temperature throughout the day. Shirley took the first temperature reading at 8:00 A.M., right as school started. What temperature does the thermometer show?

_____



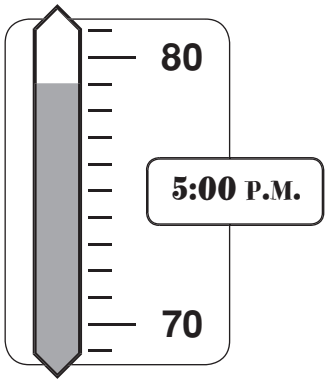
2. Rhonda took the next reading at 12:00 noon. What temperature does the thermometer show?

_____



3. Sonia took the third reading of the day at 5:00 P.M. What temperature does the thermometer show?

_____



4. How much did the temperature rise from 8:00 A.M. until 12:00 noon?

_____

5. How much hotter was the temperature at 5:00 P.M. compared to 8:00 A.M.?

_____

Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

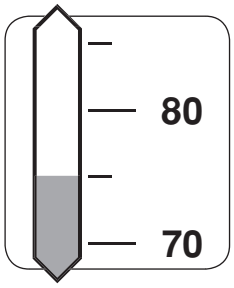
Math Test

Name _____

Fill in the circle next to the correct answer.

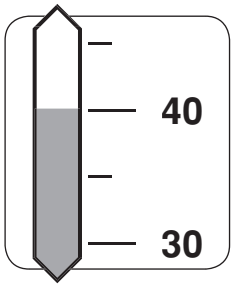
For Numbers 1 through 4, read the thermometer.

1.



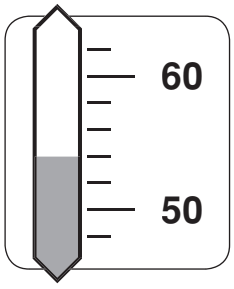
Ⓐ 75°
Ⓑ 70°
Ⓒ 85°
Ⓓ 80°

2.



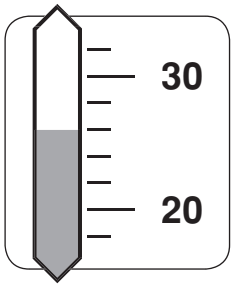
Ⓐ 45°
Ⓑ 42°
Ⓒ 40°
Ⓓ 30°

3.



Ⓐ 50°
Ⓑ 54°
Ⓒ 55°
Ⓓ 64°

4.



Ⓐ 20°
Ⓑ 24°
Ⓒ 30°
Ⓓ 26°

5. The temperature at 8:00 A.M. was 45° and at 12:00 noon it was 76°. How much did the temperature rise?

Ⓐ 31° Ⓒ 36°
Ⓑ 29° Ⓓ 35°

6. The temperature at 7:00 A.M. was 37° and at 3:00 P.M. it was 52°. How much did the temperature rise?

Ⓐ 25° Ⓒ 17°
Ⓑ 20° Ⓓ 15°

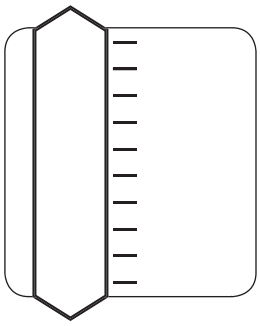
7. The temperature at 3:00 P.M. was 45° and at 9:00 P.M. it was 29°. How much did the temperature go down?

Ⓐ 14° Ⓒ 24°
Ⓑ 16° Ⓓ 20°

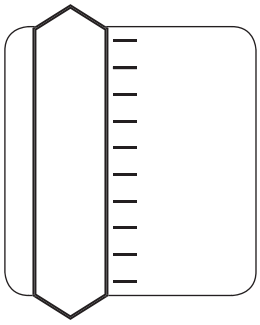
8. The temperature at 1:00 P.M. was 59° and at 9:00 P.M. it was 45°. How much did the temperature go down?

Ⓐ 20° Ⓒ 14°
Ⓑ 10° Ⓓ 4°

9. Label the thermometer to show 46°.



10. Label the thermometer to show a temperature 28° higher than the thermometer above.

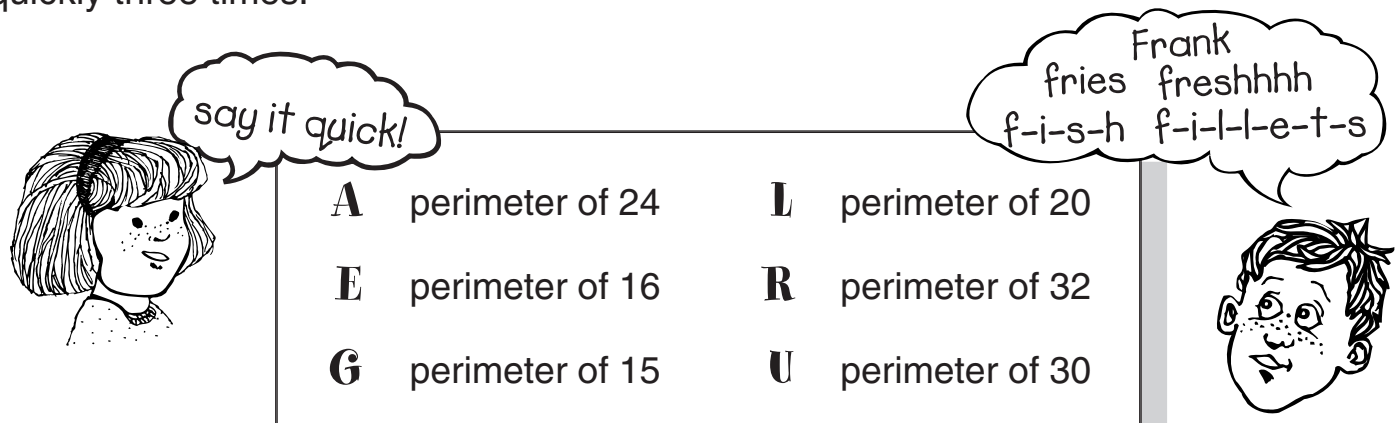


Read a thermometer (Fahrenheit and Celsius) and solve problems related to temperature

Tongue Twister

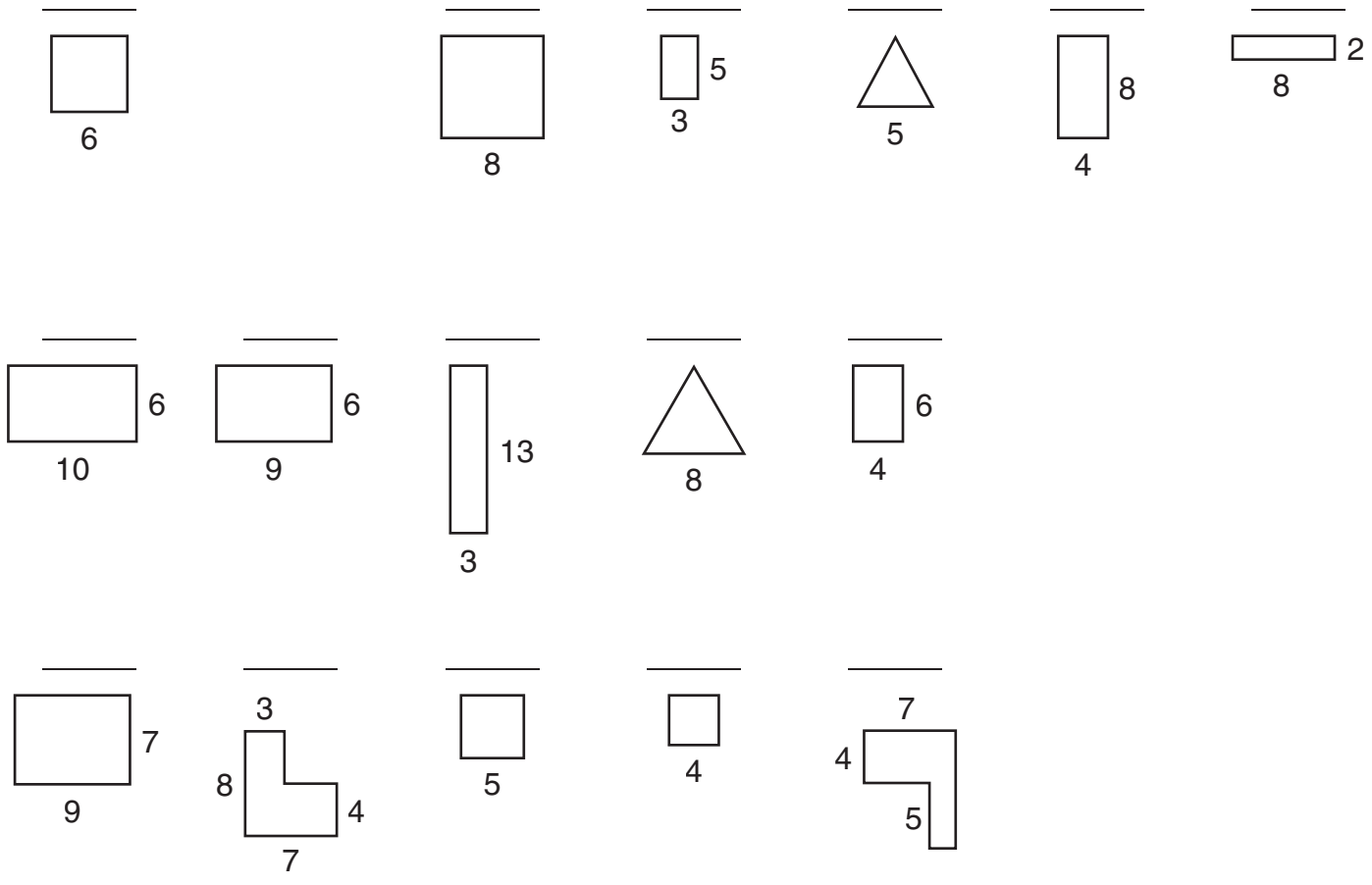
Name _____

Determine the perimeter of each figure below. Then write the corresponding letter on the line above the figure. Read the tongue twister and try to say it quickly three times.



A	perimeter of 24	**L**	perimeter of 20
E	perimeter of 16	**R**	perimeter of 32
G	perimeter of 15	**U**	perimeter of 30

A



Find perimeter of simple shapes

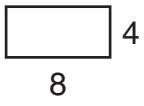
What Is a Giraffe's Favorite Kind of Joke?

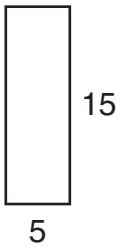
Name _____

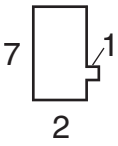
To solve the riddle, look at each figure below and determine its perimeter. Then write the corresponding letter on the line above the figure. The letters will spell out the answer to the riddle.

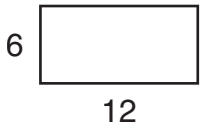
A	perimeter of 24	**S**	perimeter of 36
L	perimeter of 20	**T**	perimeter of 40
O	perimeter of 18	**Y**	perimeter of 30
R	perimeter of 28		

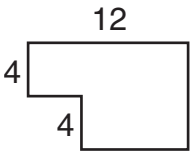
A

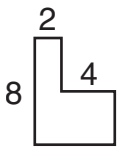


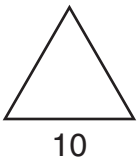










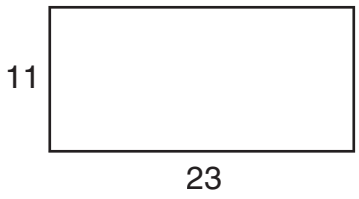


Find perimeter of simple shapes

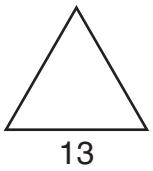
Find the Perimeter

Name _____

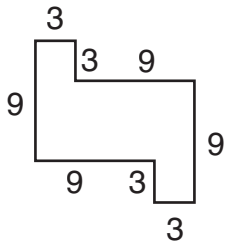
Calculate the perimeter of each shape.

1. 

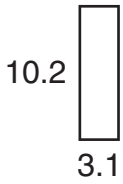
_____

2. 

_____

3. 

_____

4. 

_____

5. Using a ruler, draw a figure that has a perimeter of 24 centimeters.

6. Draw a different figure that has a perimeter of 8 inches.

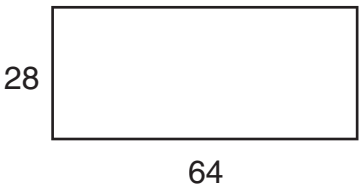
7. Draw another figure that has a perimeter of 9 inches.

Find perimeter of simple shapes

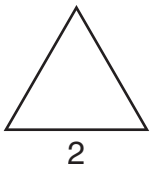
Polygon Perimeters

Name _____

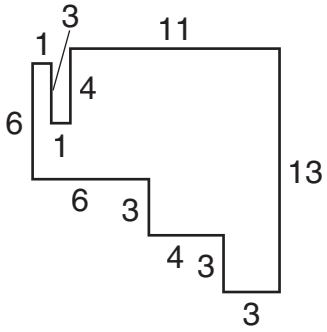
Calculate the perimeter of each shape.

1. 

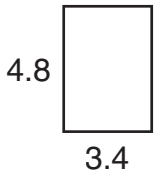
_____

2. 

_____

3. 

_____

4. 

_____

5. Using a ruler, draw a figure that has a perimeter 16 centimeters.

6. Draw a different figure that has a perimeter of 12 inches.

7. Draw another figure that has a perimeter of 15 inches.

Find perimeter of simple shapes

Using Perimeter

Name _____

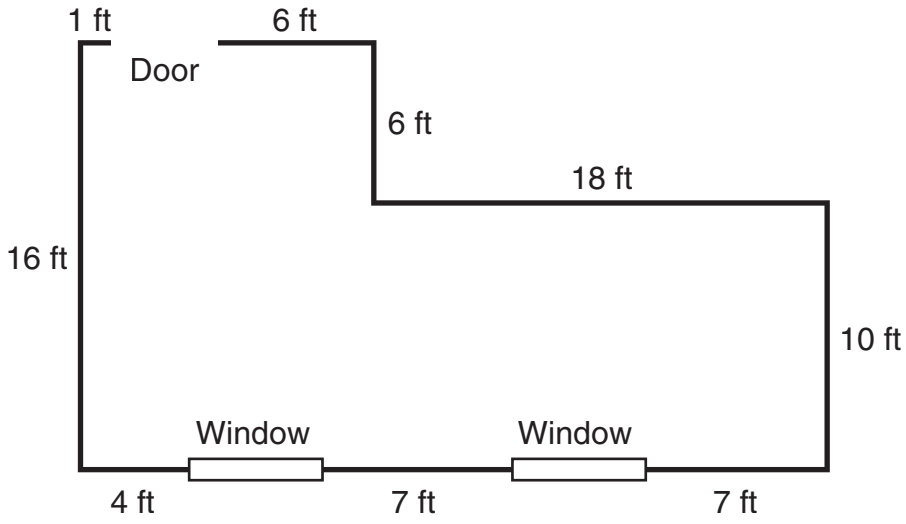
Solve each problem.

1. Jim's classroom has the following floor plan:

The classroom is 24 feet by 45 feet. Each door is 4 feet wide. The carpenters for the school district would like to put some new trim around the base of the room. They want to put the trim along all the inside walls, but not on the two doors. What is the perimeter of the room after you subtract the two doors? If the boards are 10 feet in length, how many boards will they need?

_____

2. Sharon's bedroom walls have the following layout:



She wants to put up a wallpaper border halfway between her ceiling and her floor. She does not plan to put the wallpaper border across the door or either of the two windows. How long of a wallpaper border does she need? If each roll has 4 yards, how many rolls does she need to buy?

_____

Find perimeter of simple shapes

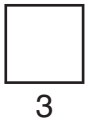
Math Test

Name _____

Fill in the circle next to the correct answer.

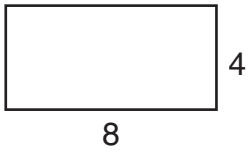
For Numbers 1 through 6, find the perimeter of each figure.

1.



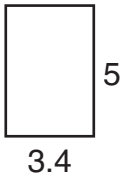
Ⓐ 3 Ⓑ 6 Ⓒ 9 Ⓓ 12

2.



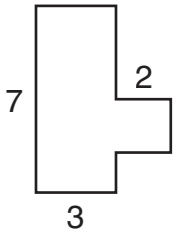
Ⓐ 8 Ⓑ 12 Ⓒ 24 Ⓓ 4

3.



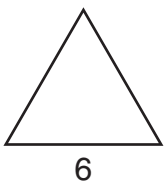
Ⓐ 16.8 Ⓑ 16 Ⓒ 7.4 Ⓓ 3.9

4.



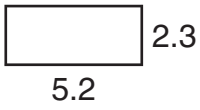
Ⓐ 12 Ⓑ 24 Ⓒ 5 Ⓓ 17

5.



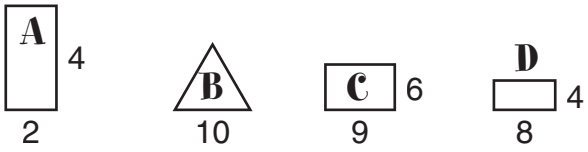
Ⓐ 6 Ⓑ 12 Ⓒ 18 Ⓓ 24

6.



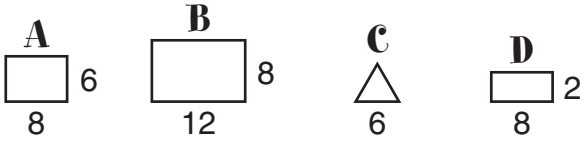
Ⓐ 7.5 Ⓑ 14 Ⓒ 14.5 Ⓓ 15

7. Which figure has a perimeter of 12?



Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

8. Which figure has a perimeter of 20?



Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

9. Draw a rectangle that has a perimeter of 24.

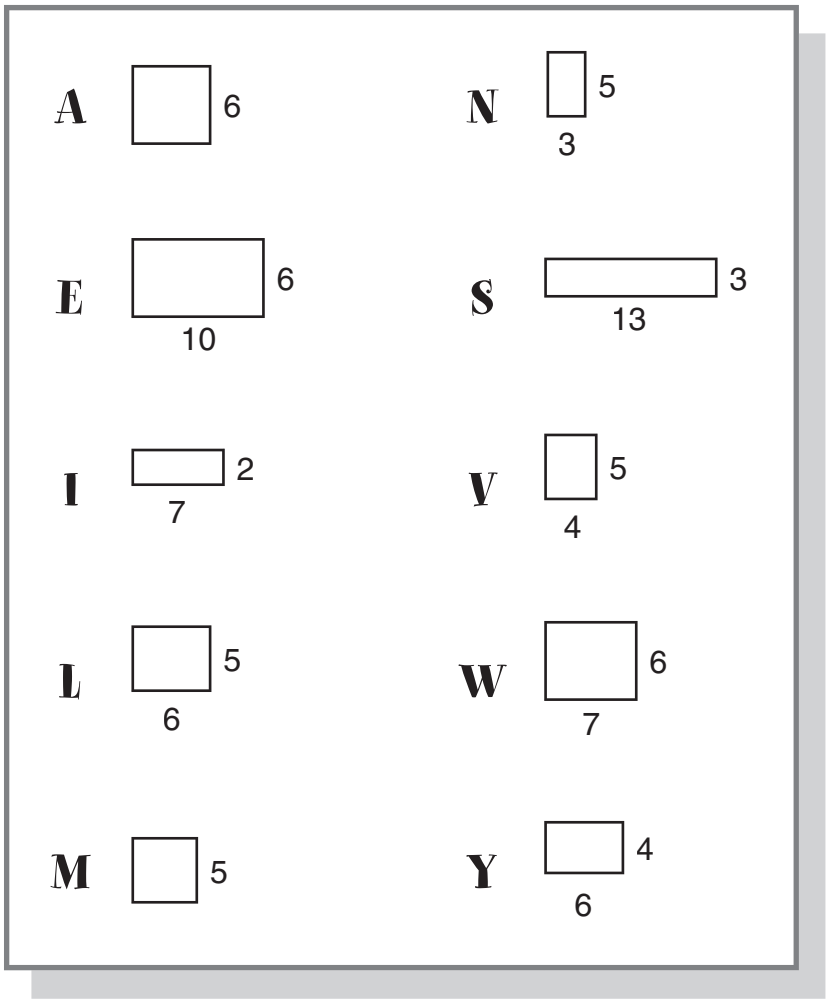
10. Draw an irregular figure that has a perimeter of 16.

Find perimeter of simple shapes

Tongue Twister

Name _____

Find the area of each figure. Then write the corresponding letter on the each line above the area. Read the tongue twister and try to say it quickly three times.



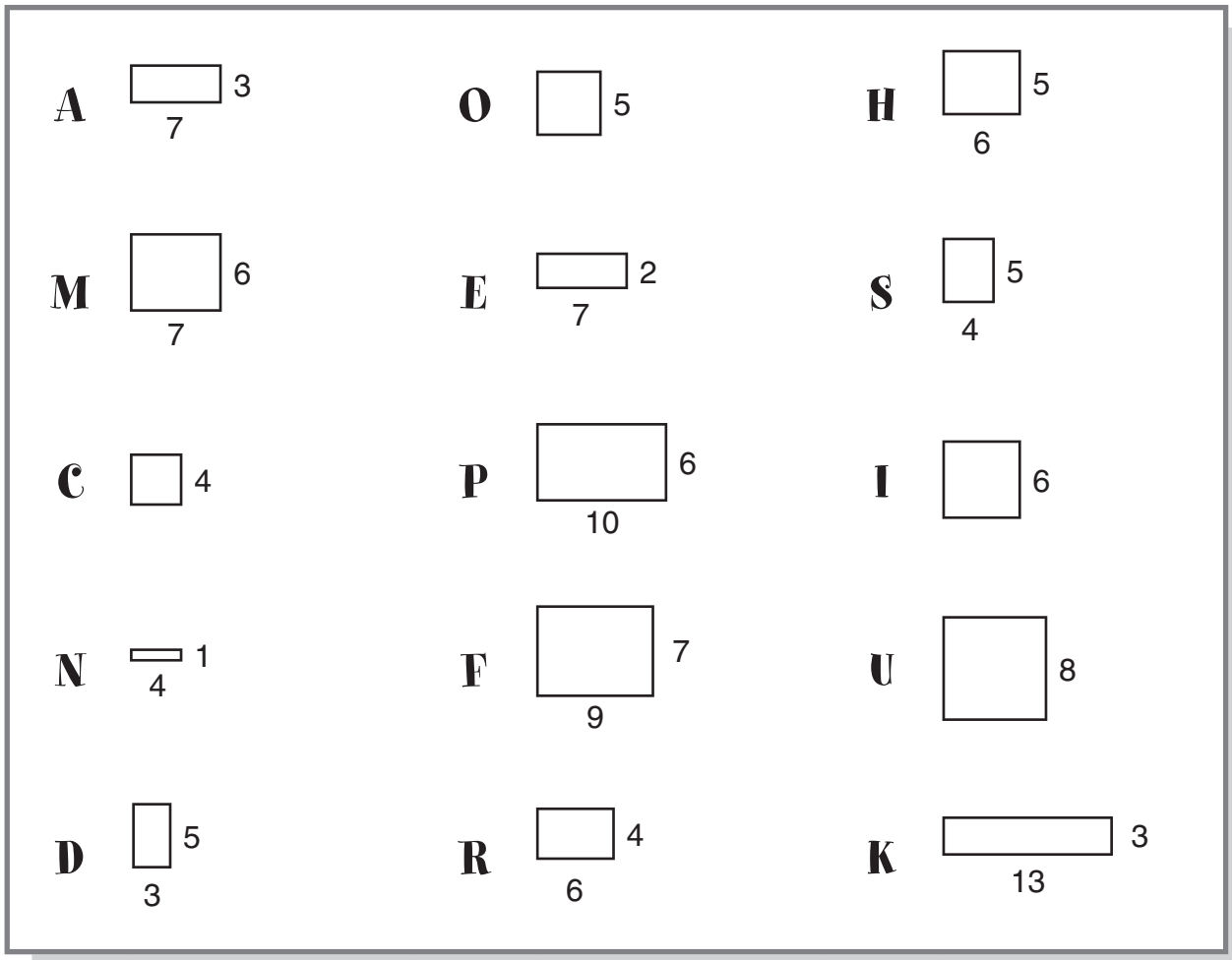
39	60	20	60	15		39	14	30	30	24
39	42	36	15	39		39	42	36	25	

Compute area of squares and rectangles

Riddle

Name _____

Find the area of each figure. Then write the corresponding letter on the line above the area. The letters will spell out the answer to the riddle.



Why was Cinderella such a bad basketball player?

20	30	14		30	21	15		21	
60	64	42	60	39	36	4		63	25	24
21		16	25	21	16	30			

Compute area of squares and rectangles

Find the Area

Name _____

What is the area of each figure?

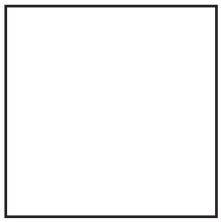
1.

2 ft.

5 ft.

_____ square feet

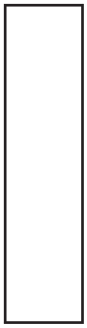
2.



2 cm

_____ square centimeters

3.

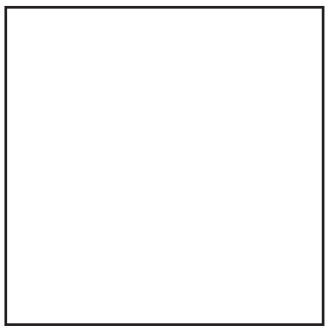


8 in.

2 in.

_____ square inches

4.



24 ft.

_____ square feet

5.

15 m

30 m

_____ square meters

6.

30 mm

90 mm

_____ square millimeters

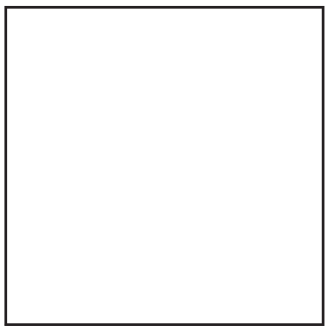
Compute area of squares and rectangles

What Is the Area?

Name _____

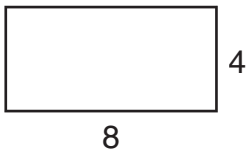
What is the area of each figure?

1.



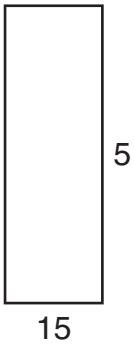
_____

2.



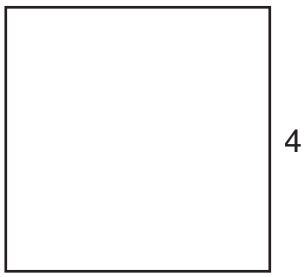
_____

3.



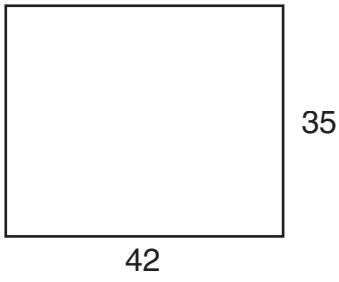
_____

4.



_____

5.



_____

6.

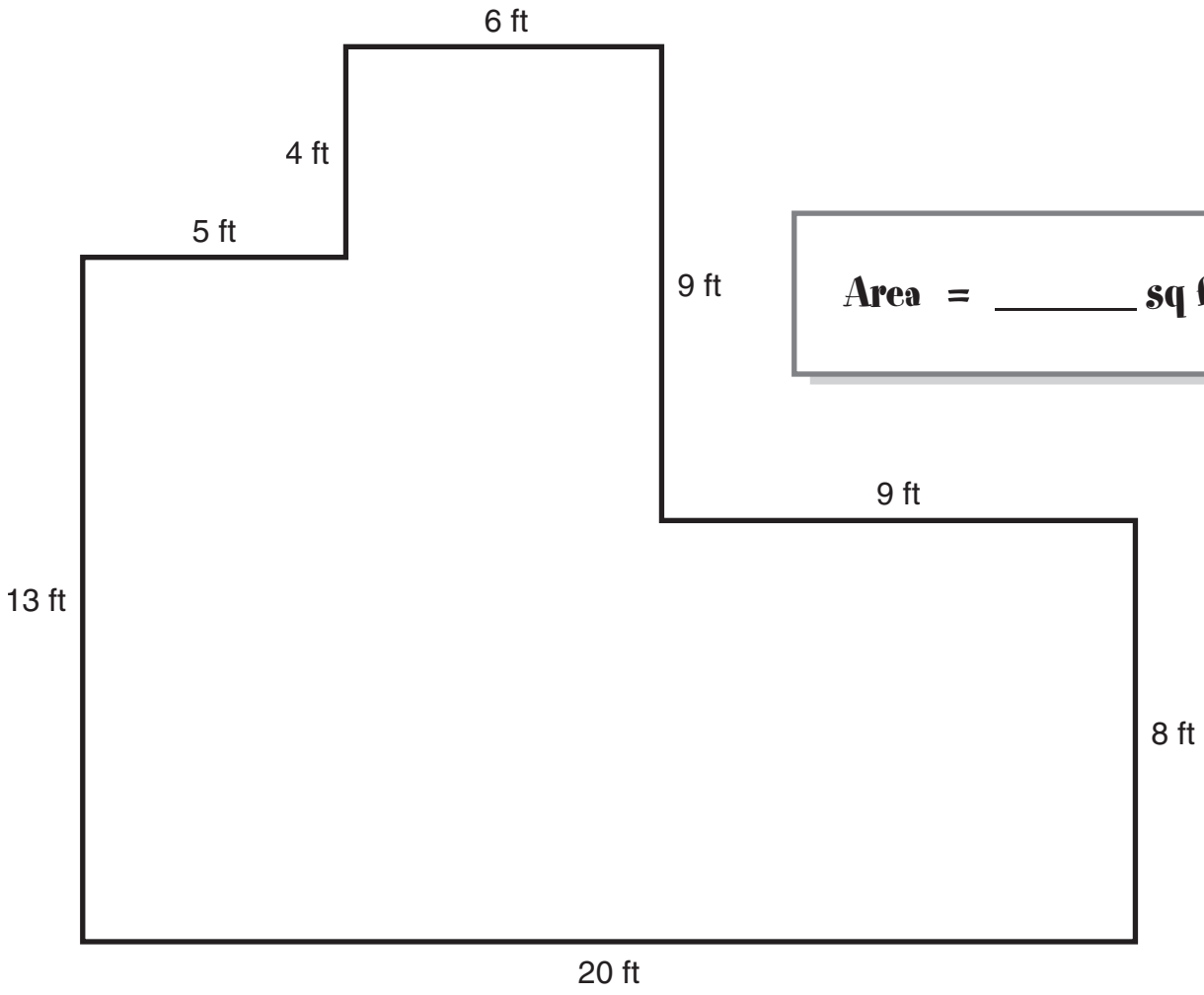
_____

Compute area of squares and rectangles

Two Ways

Name _____

Can you find the area of the following figure using at least two different ways? Explain the steps for each procedure you develop.



Area = _____ sq ft

Procedure 1

_____

_____

Procedure 2

_____

_____

Compute area of squares and rectangles

Math Test

Name _____

Fill in the circle next to the correct answer.

1. What is the area of a square that has a side length of 3?

Ⓐ 6 Ⓒ 9
Ⓑ 3 Ⓓ 12

2. What is the area of a rectangle that is 8 by 4?

Ⓐ 32 Ⓒ 12
Ⓑ 16 Ⓓ 24

3. What is the area of a rectangle that is 7 by 2?

Ⓐ 16 Ⓒ 9
Ⓑ 14 Ⓓ 18

4. What is the area of a square that has a side length of 20?

Ⓐ 20 Ⓒ 40
Ⓑ 80 Ⓓ 400

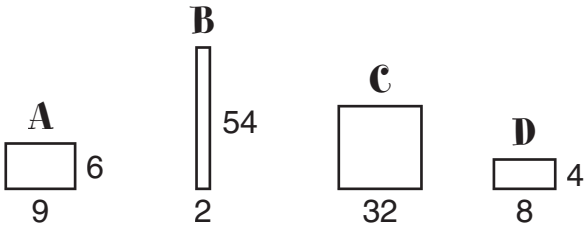
5. What is the area of a rectangle that is 5 by 4?

Ⓐ 18 Ⓒ 20
Ⓑ 4 Ⓓ 9

6. What is the area of a square that has a side length of 35?

Ⓐ 1,225 Ⓒ 70
Ⓑ 35 Ⓓ 14

For Numbers 7 and 8, use these figures.



7. Which figure has an area of 54?

Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

8. Which figure has an area of 32?

Ⓐ figure A Ⓒ figure C
Ⓑ figure B Ⓓ figure D

9. Draw a rectangle with an area of 24 square units.

10. Draw a rectangle with different dimensions that still has an area of 24 square units.

Compute area of squares and rectangles

What's Brown, Quacks, and Is Full of Words?

Name _____

To solve the riddle, look at each clockface below and determine what time it represents. Write the letter from the clock in front of the corresponding time. The letters will spell out the solution to the riddle when read from top to bottom.

_____ 9:30

_____ 8:00

_____ 4:45

_____ 2:30

_____ 1:00

_____ 5:20

_____ 8:40

_____ 12:40

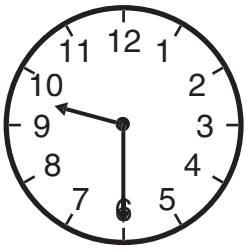
_____ 5:30

_____ 9:30

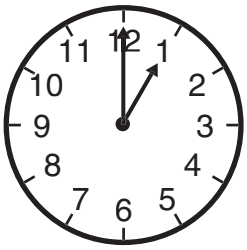
_____ 7:15

_____ 11:50

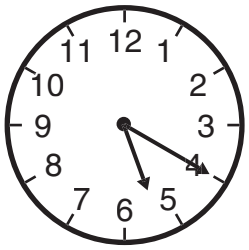
A



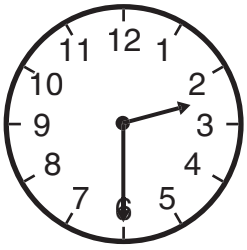
K



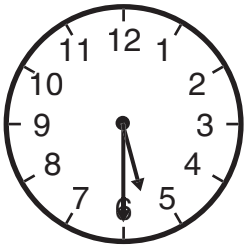
T



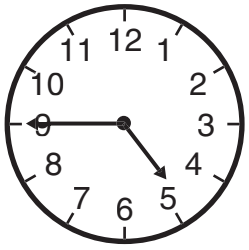
C



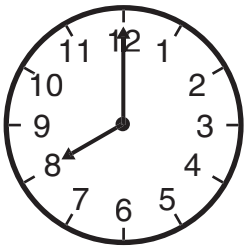
N



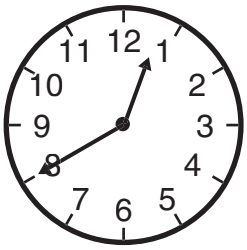
U



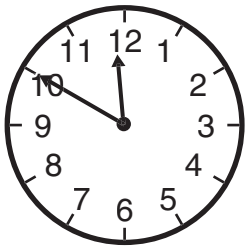
D



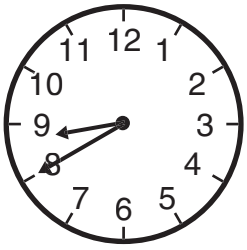
O



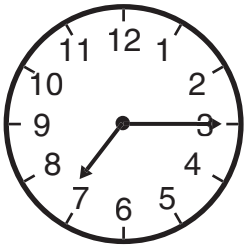
Y



I



R



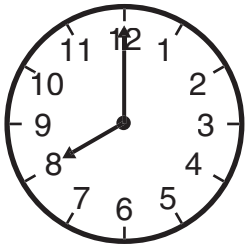
Tell time and calculate elapsed time (including A.M. and P.M.)

Tongue Twister

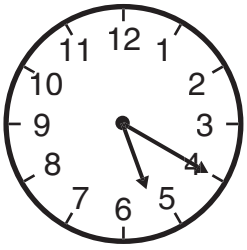
Name _____

Look at each clockface below and determine what time it represents. Write the letter from the clock above the corresponding time(s). The letters will spell out the tongue twister. Try to say it fast three times.

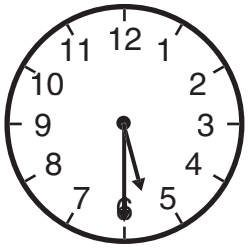
C



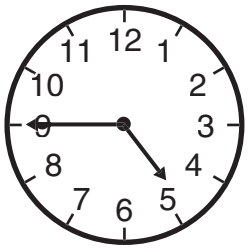
L



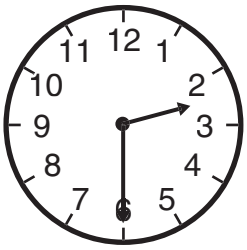
T



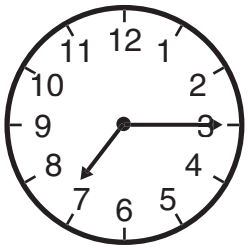
F



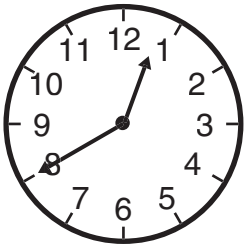
O



K



S



5:20	2:30	5:30		5:20	2:30	12:40	5:30
5:20	2:30	5:30	12:40		2:30	4:45	
5:20	2:30	8:00	7:15	12:40			

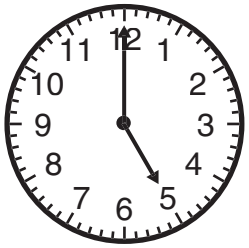
Tell time and calculate elapsed time (including P.M. and A.M.)

What Time Is It?

Name _____

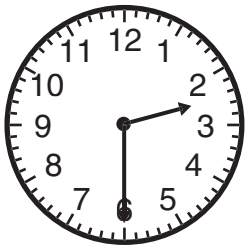
Below each clock, write the time that is represented.

1.



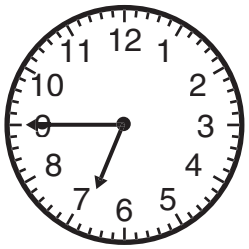
_____

2.



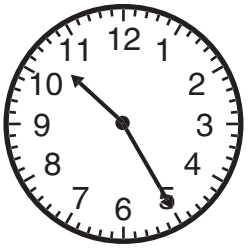
_____

3.



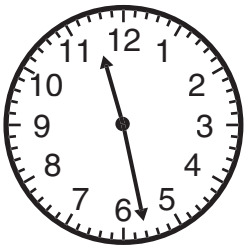
_____

4.



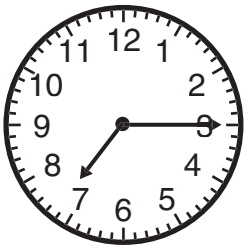
_____

5.



_____

6.



_____

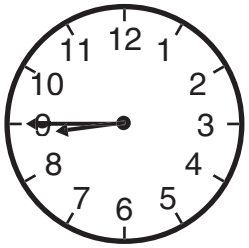
Tell time and calculate elapsed time (including A.M. and P.M.)

Write the Time

Name _____

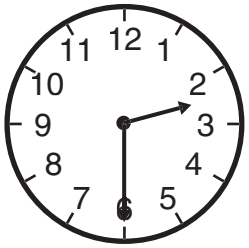
Under each clock, write the time that is represented.

1.



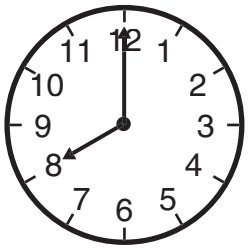
_____

2.



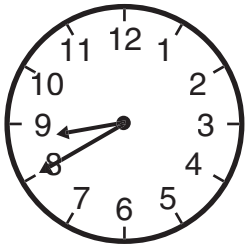
_____

3.



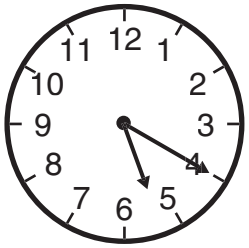
_____

4.



_____

5.



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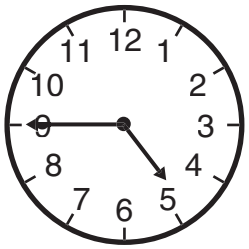
6.



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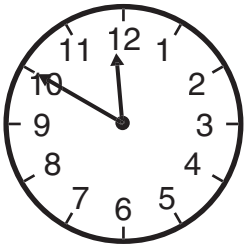
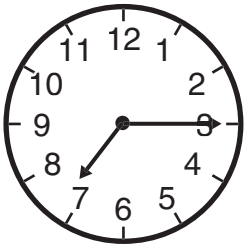
7.



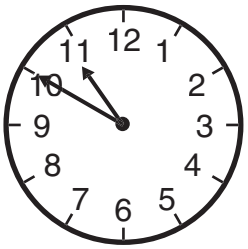
_____

8.



_____

9.



_____

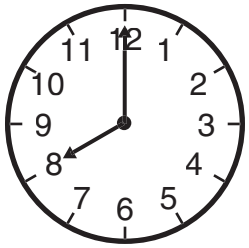
Tell time and calculate elapsed time (including P.M. and A.M.)

Birthday Party

Name _____

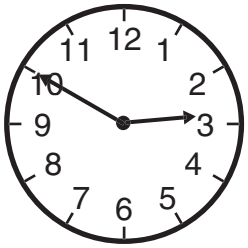
The clocks below are in correct sequence for the Saturday that Jimmy had his birthday party. Below each clock, write the time that it represents.

House is clean for party



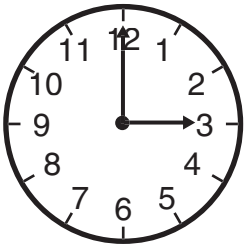
_____

First guest arrives



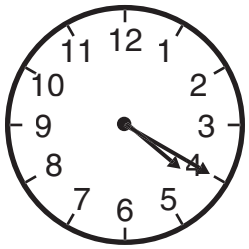
_____

Party begins



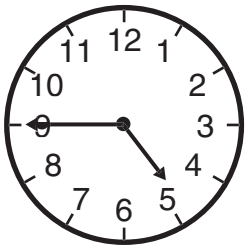
_____

Presents are opened



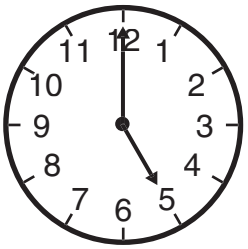
_____

Cake is eaten



_____

Party is over



_____

Answer the following questions.

1. How long was Jimmy's birthday party?

   _____

2. How long was it between the time the party started and when the presents were opened?

   _____

3. Which clock(s) do you think were during the A.M. time period?

   _____

4. How long was the house clean before the first guest arrived?

   _____

5. How long after presents were opened was the cake eaten?

   _____

Tell time and calculate elapsed time (including A.M. and P.M.)

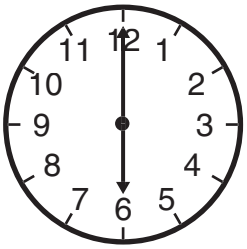
Math Test

Name _____

Fill in the circle next to the correct answer.

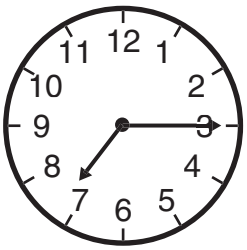
For Numbers 1 through 6, find the time that each clock shows.

1.



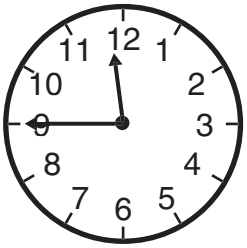
Ⓐ 12:00
Ⓑ 6:00
Ⓒ 3:00
Ⓓ 4:00

2.



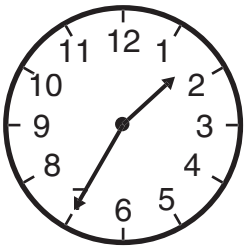
Ⓐ 3:35
Ⓑ 7:03
Ⓒ 7:00
Ⓓ 7:15

3.



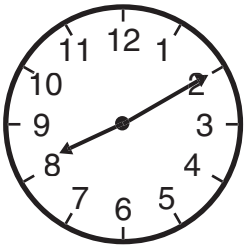
Ⓐ 11:45
Ⓑ 12:45
Ⓒ 9:00
Ⓓ 8:55

4.



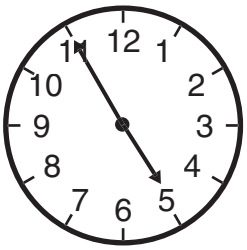
Ⓐ 2:35
Ⓑ 7:10
Ⓒ 1:35
Ⓓ 7:00

5.



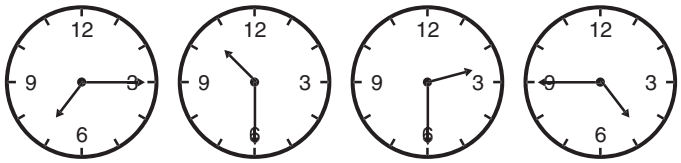
Ⓐ 2:40
Ⓑ 8:10
Ⓒ 2:10
Ⓓ 8:40

6.



Ⓐ 6:00
Ⓑ 4:55
Ⓒ 12:00
Ⓓ 12:55

Use these clocks to answer Numbers 7 and 8.



clock 1 **clock 2** **clock 3** **clock 4**

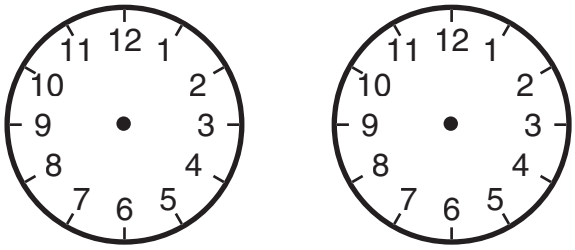
7. Which clock shows 7:15?

Ⓐ clock 1 Ⓒ clock 3
Ⓑ clock 2 Ⓓ clock 4

8. Which clock shows 2:30?

Ⓐ clock 1 Ⓒ clock 3
Ⓑ clock 2 Ⓓ clock 4

9. Helen woke up at 4:45 A.M. Draw the hands on the clock to show 4:45 A.M. She was so tired that she went to bed at 7:40 P.M. Draw the hands on the clock to show 7:40 P.M.



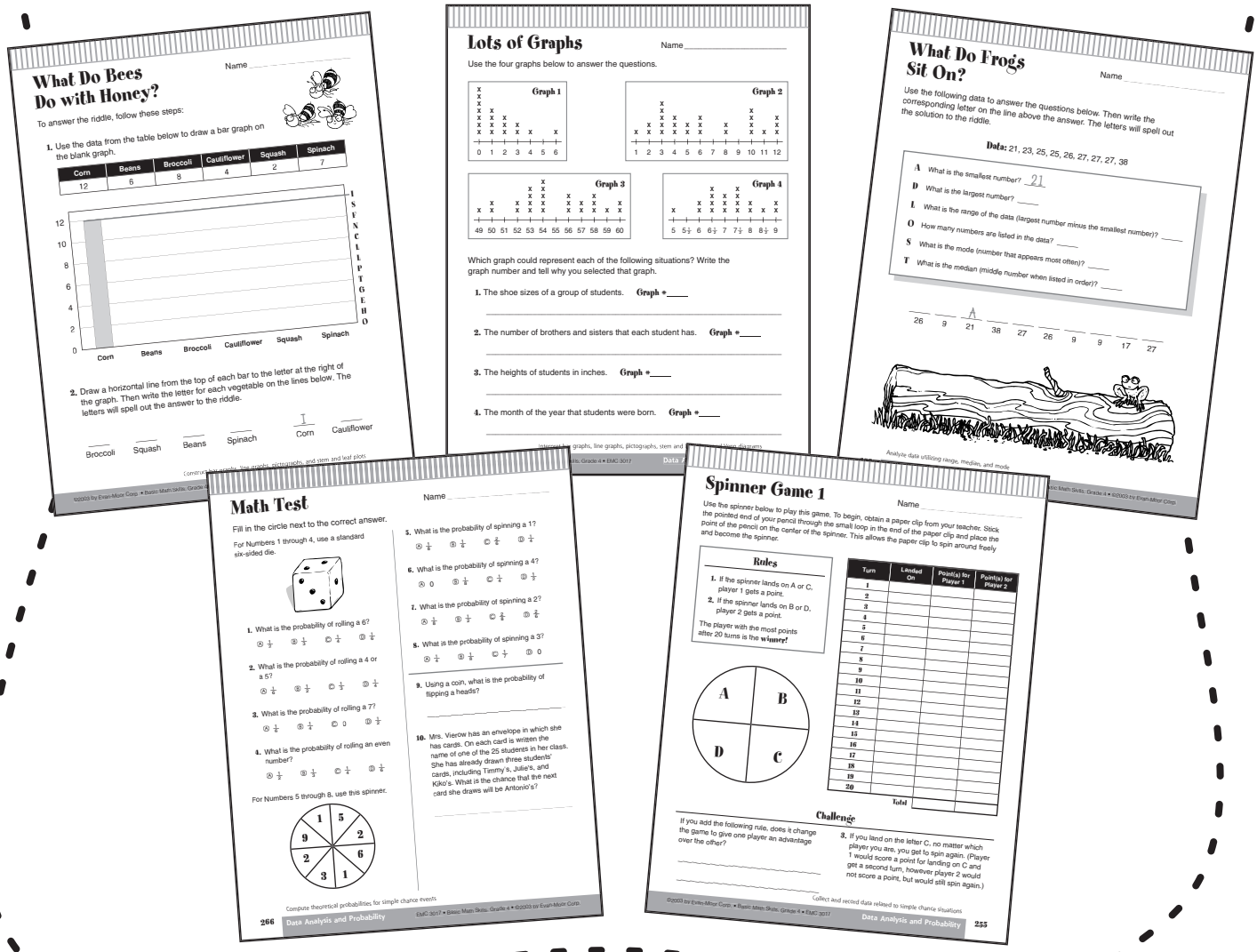
4:45 A.M. **7:40 P.M.**

10. Given the information in Number 9, how long was Helen awake?

_____

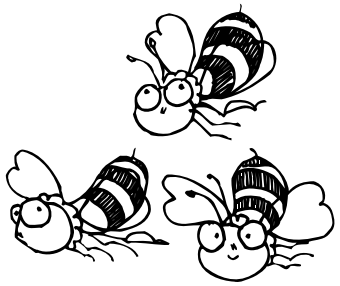
Tell time and calculate elapsed time (including P.M. and A.M.)

Data Analysis and Probability



What Do Bees Do with Honey?

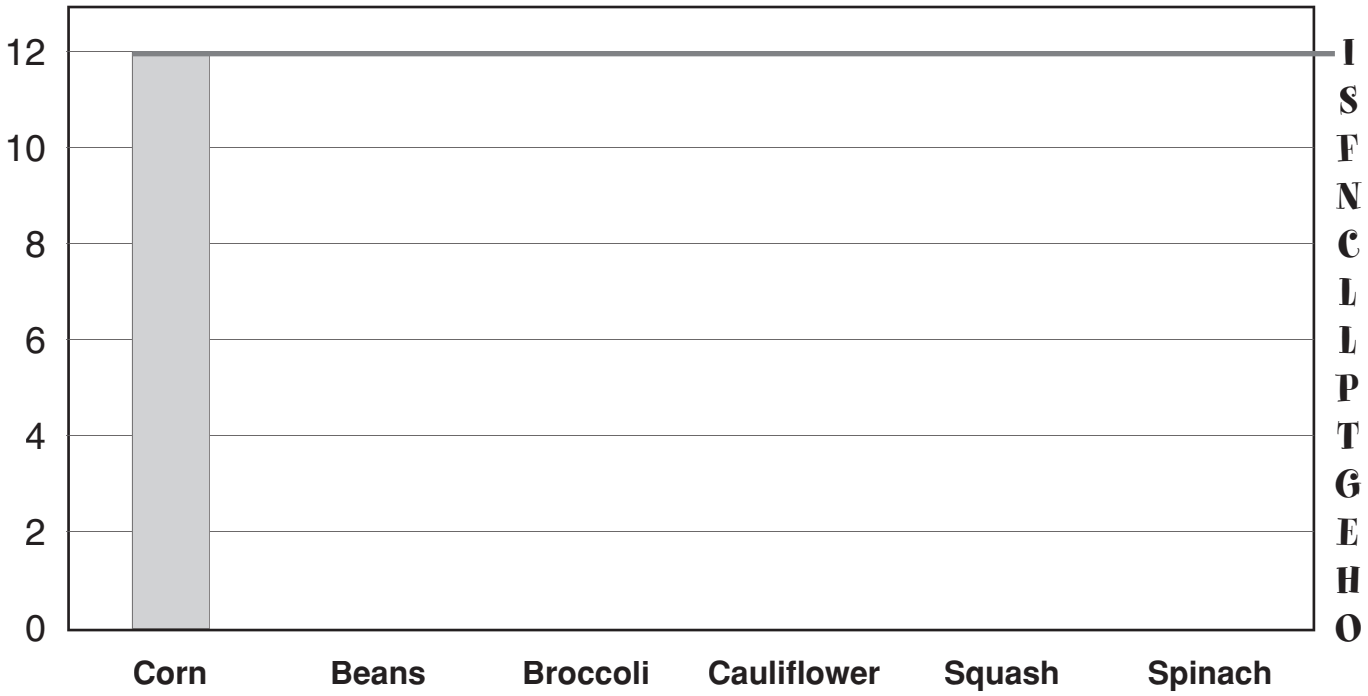
Name _____



To answer the riddle, follow these steps:

1. Use the data from the table below to construct a bar graph on the blank graph.

Corn	Beans	Broccoli	Cauliflower	Squash	Spinach
12	6	8	4	2	7



2. Draw a horizontal line from the top of each bar to the letter at the right of the graph. Then write the letter for each vegetable on the lines below. The letters will spell out the answer to the riddle.

____	____	____	____	I	____
Broccoli	Squash	Beans	Spinach	Corn	Cauliflower

Construct bar graphs, line graphs, pictographs, and stem and leaf plots

Riddle

Name _____

To answer the riddle, follow these steps:

1. The table below represents the number of students that selected each flavor as their favorite soda. Use the table to construct a bar graph to represent the information on the graph.

Grape	Orange	Pineapple	Cherry	Cream Soda	Lemon-Lime
6	2	4	9	11	3

2. Draw a horizontal line from the top of each bar to the letter at the right of the graph. Then write the letter for each flavor on the lines below. The letters will spell out the answer to the riddle.

What is sweet, black, and makes history lessons interesting?

_____	_____	_____	E	_____
Orange	Pineapple	Cherry	Grape	Cream Soda

Construct bar graphs, line graphs, pictographs, and stem and leaf plots

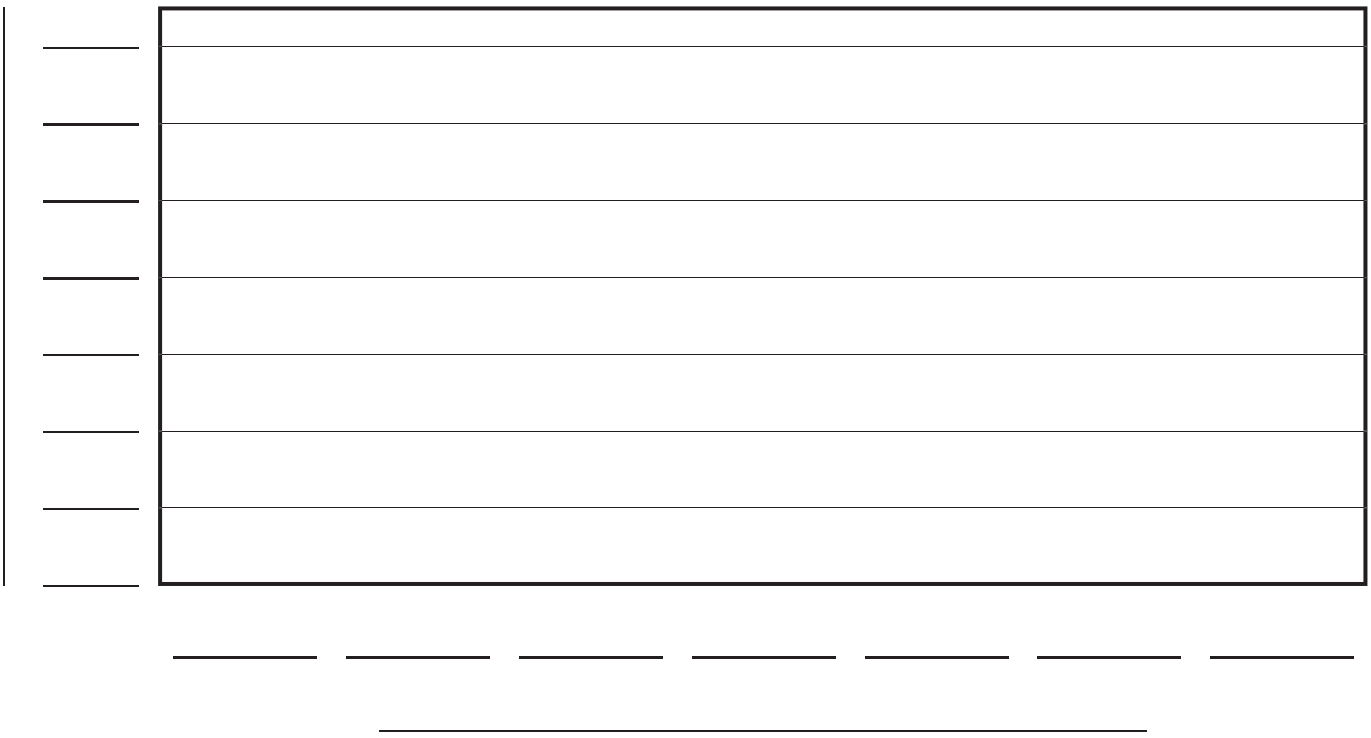
Make a Line Graph

Name _____

Two students recorded the following data for morning temperatures last week:

Monday–68 degrees, Tuesday–70 degrees, Wednesday–70 degrees, Thursday–69 degrees, Friday–71 degrees, Saturday–72 degrees, Sunday–64 degrees.

Create a table for the data and then create a line graph that accurately represents the data. Remember to include a title, a scale, and labels for your graph.



Construct bar graphs, line graphs, pictographs, and stem and leaf plots

Stem and Leaf Plots

Name _____

1. Sandra's scores for the first four spelling tests were 84, 92, 96, and 100. She made this stem and leaf plot for her scores.

Stem	Leaves
8	4
9	2 6
10	0

- For 84, she put an 8 in the tens column and a 4 in the ones column.
- For 92 and 96, she put a 9 in the tens column and a 2 and 6 in the ones column.
- For 100, she put a 10 in the tens column and a 0 in the ones column.

Her next 4 scores were 86, 88, 98, and 100. Add these scores to her stem and leaf plot.

2. George's spelling test scores were 60, 64, 76, 78, 84, 88, 90, 92, 98, and 100. In the space below, create a new stem and leaf plot for George's scores.

Stem	Leaves

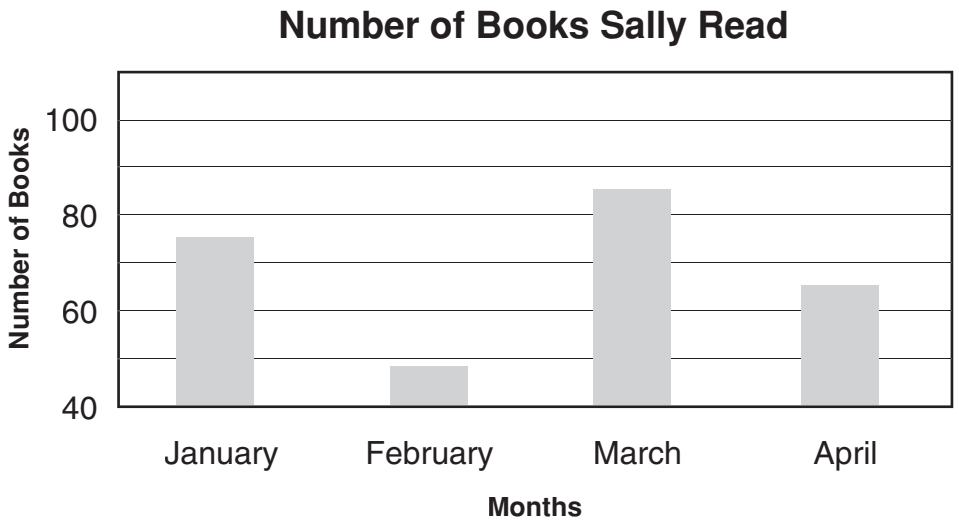
Construct bar graphs, line graphs, pictographs, and stem and leaf plots

Using a Graph

Name _____

Answer each question.

1. Sally kept track of the number of books she read from January through April. She created this graph to represent that information.



After looking over the graph, Juanita commented that Sally read almost five times as many books in March as she did in February. Sally disagreed with Juanita's observation. What do you think Sally pointed out to Juanita to help clear up her misunderstanding?

_____

2. What are some other things that people can do when they create graphs that might give misleading information?

_____

3. Survey your classmates about the age of one of their parents or guardians. As you gather the information, record it in a table. Then create a stem and leaf plot to represent this information.

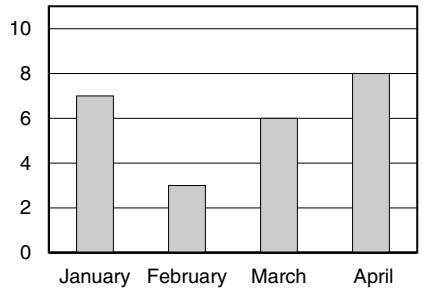
Construct bar graphs, line graphs, pictographs, and stem and leaf plots

Math Test

Name _____

Fill in the circle next to the correct answer.

Use this graph for Numbers 1 through 4.



1. What type of graph is this?
- Ⓐ bar
- Ⓑ line
- Ⓒ stem and leaf
- Ⓓ pictograph

2. What is the title of the graph?
- Ⓐ Month
- Ⓑ 0–10
- Ⓒ January
- Ⓓ Teeth Lost in Room 2b

3. What do the numbers represent?
- Ⓐ number of children
- Ⓑ number of months
- Ⓒ number of teeth lost
- Ⓓ number of classes

4. How many teeth were lost during the month of March?

Ⓐ 5 Ⓑ 4 Ⓒ 6 Ⓓ 8

Use this stem and leaf plot for Numbers 5 through 8.

Math Test Scores

Stem	Leaves
4	8
5	
6	6
7	2 6
8	2 4 8
9	2 4 6 8 8 8
10	0 0

5. How many test scores are represented?

Ⓐ 7 Ⓑ 15 Ⓒ 22 Ⓓ 100

6. What was John's lowest math test score?

Ⓐ 4 Ⓑ 8 Ⓒ 6 Ⓓ 48

7. How many 100s did John get?

Ⓐ 1 Ⓑ 2 Ⓒ 3 Ⓓ 0

8. What test score did John get the most often?

Ⓐ 98 Ⓑ 100 Ⓒ 72 Ⓓ 50

9. Use the data below to create a pictograph about Mr. Call's class and each student's favorite kind of apple.

Granny Smith: 𝍸 III
Red Delicious: 𝍸 I
Golden Delicious: 𝍸 𝍸 III

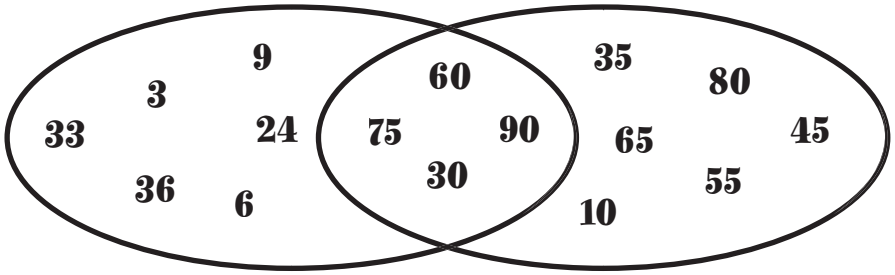
10. Approximate the high temperatures over the last week and create a line graph to represent the data.

Construct bar graphs, line graphs, pictographs, and stem and leaf plots

Riddle

Name _____

To answer the riddle, answer each question below the Venn diagram. Then write the corresponding letter on the line in front of the clue. The letters will spell out the answer to the riddle from top to bottom.



What do a cobra, a car, and a snowsuit have in common?

_A_ What do all the numbers in the left circle have in common?

_____ What do all the numbers in the right circle have in common?

_____ What do all the numbers in the intersection have in common?

_____ What is another number that could be added to the left circle?

_____ What is another number that could be added to the right circle?

C	They are all multiples of 2.	**S**	They are all multiples of 10.	**M**	26
A	They are all multiples of 3.	**O**	They are all multiples of 15.	**N**	32
H	They are all multiples of 5.	**O**	21	**D**	40

Challenge

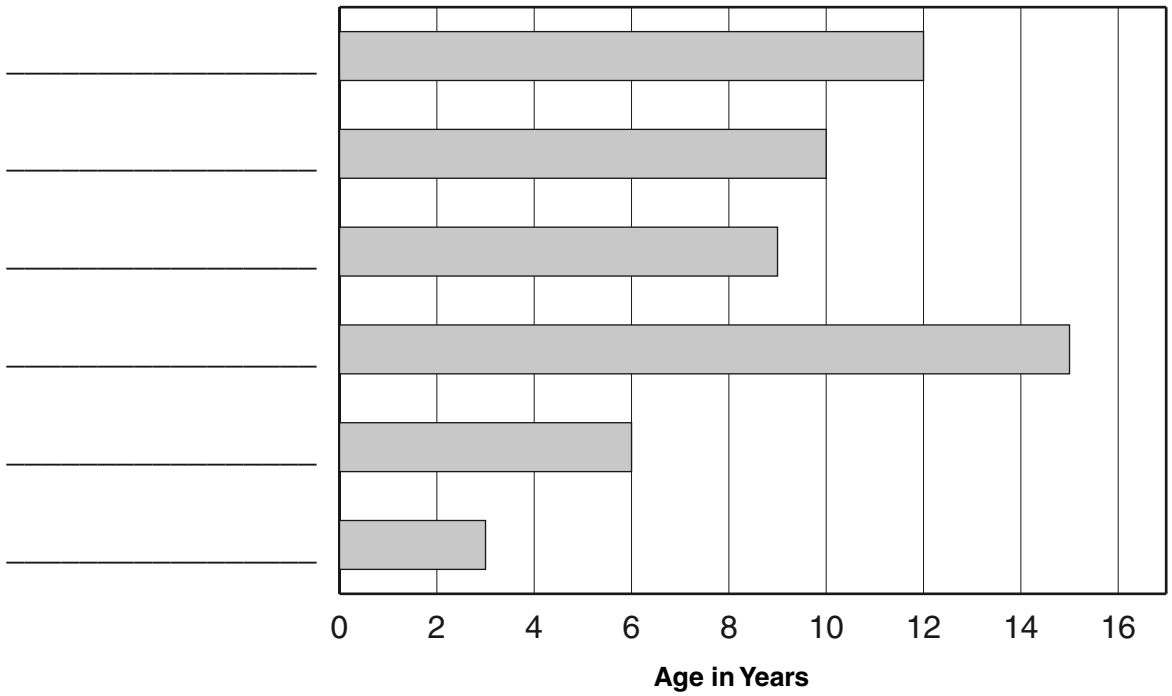
List three other numbers that could be included in the intersection of the Venn diagram. _____ _____ _____

Interpret bar graphs, line graphs, pictographs, stem and leaf plots, and Venn diagrams

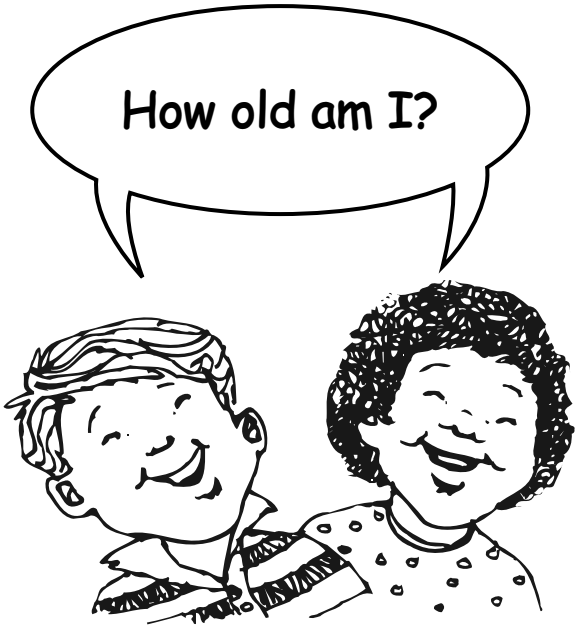
Logical Reasoning

Name _____

Use the information below to label each bar with the appropriate name.



1. Six children are named Andra, Andrew, Juan, Lisa, Marta, and Tim.
2. Lisa is the youngest.
3. Juan is the oldest.
4. Marta is one year older than Andra.
5. Andrew is twice as old as Tim.

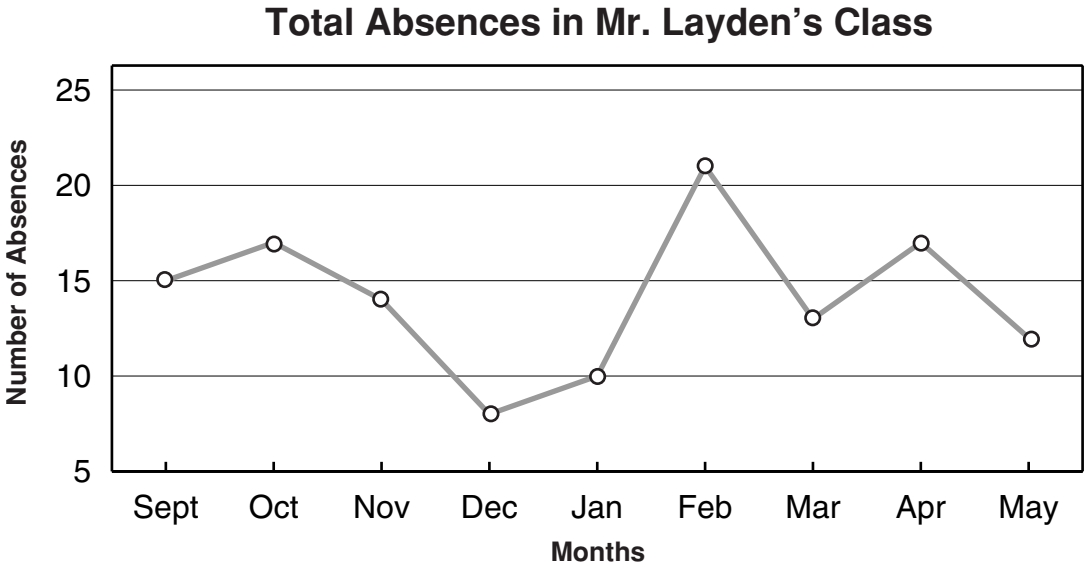


Interpret bar graphs, line graphs, pictographs, stem and leaf plots, and Venn diagrams

Analyzing Data

Name _____

Use the following graph to answer the questions.



1. What does this graph represent?

_____

_____

_____

2. Why doesn't the graph include all the months, such as July?

_____

3. What month has the fewest absences?

_____

4. What month has the most absences?

_____

5. What is the range of the absences for these months?

_____

6. What might be one explanation for fewer absences in the month of December?

_____

_____

_____

_____

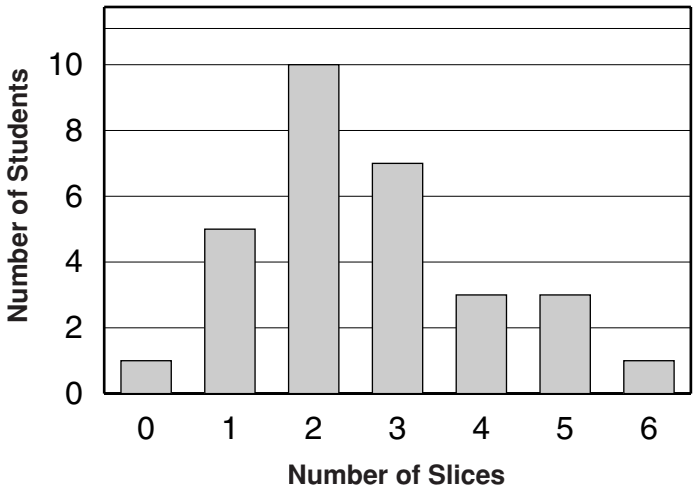
Interpret bar graphs, line graphs, pictographs, stem and leaf plots, and Venn diagrams

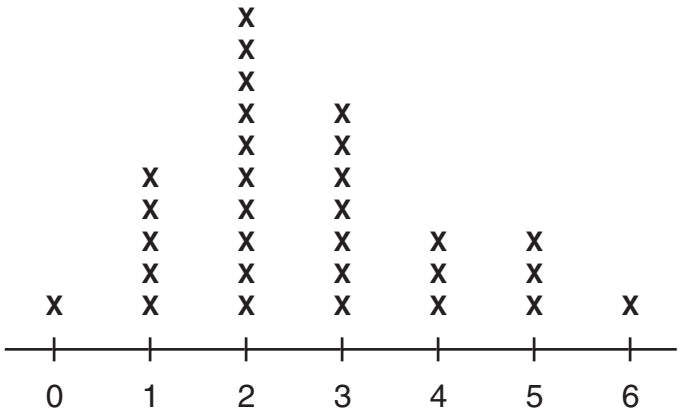
Pizza Time

Name _____

The following graphs represent the same data. They both represent the number of students in Mrs. Timm's class that ate pizza and the number of slices each student ate. The first is a bar graph and the second is a line plot. Use these graphs to answer the questions.

Pizza Eaten at Class Party





1. How many students ate one slice of pizza?

_____

2. How many slices did all the students in Mrs. Timm's class eat?

_____

3. What do the numbers across the bottom of the line plot represent?

_____

4. What does each X represent on the line plot?

_____

5. How do these two graphs compare?

_____

6. What is the largest number of slices of pizza eaten by one student?

_____

7. Which graph do you think is easier to read and why?

_____

_____

_____

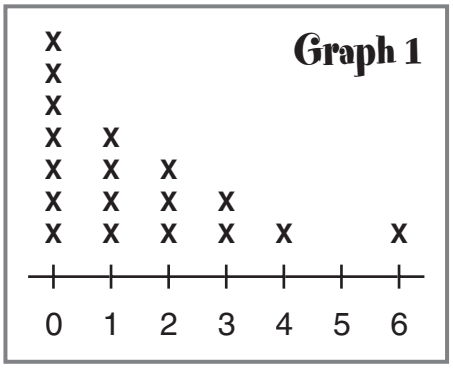
_____

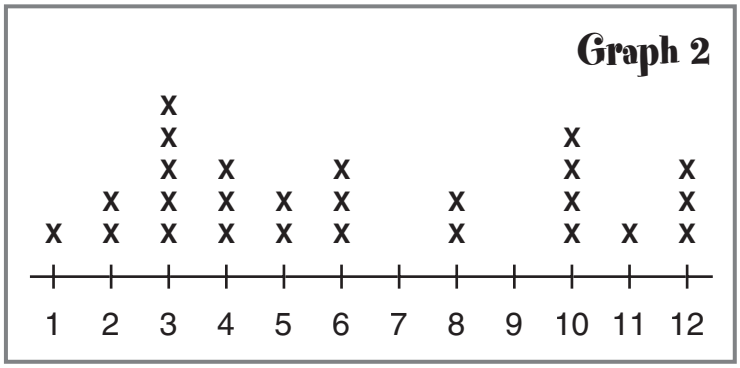
Interpret bar graphs, line graphs, pictographs, stem and leaf plots, and Venn diagrams

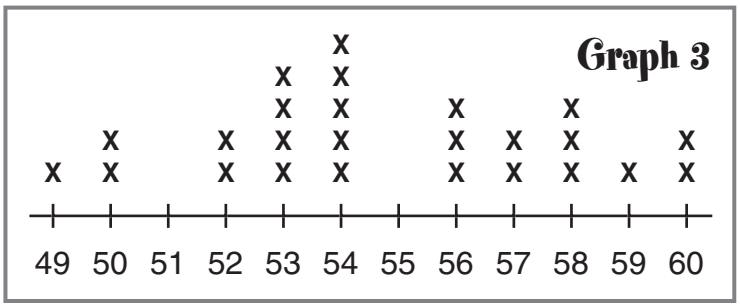
Lots of Graphs

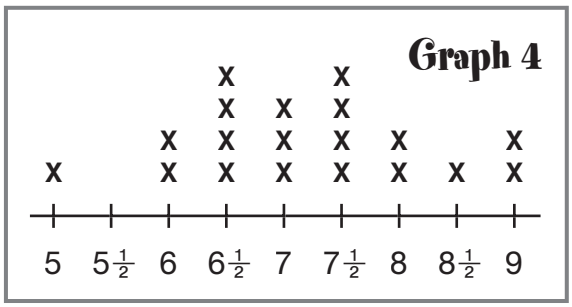
Name _____

Use the four graphs below to answer the questions.









Which graph could represent each of the following situations? Write the graph number and tell why you selected that graph.

1. The shoe sizes of a group of students. **Graph #**_____

_____

2. The number of brothers and sisters that each student has. **Graph #**_____

_____

3. The heights of students in inches. **Graph #**_____

_____

4. The month of the year that students were born. **Graph #**_____

_____

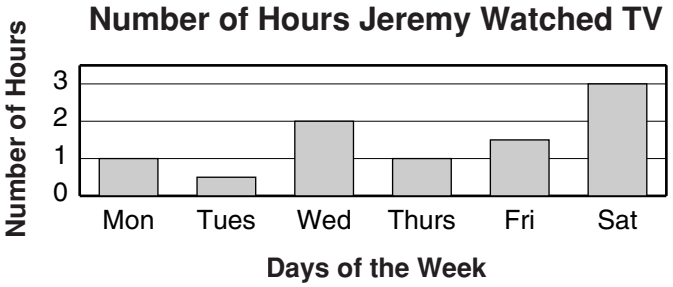
Interpret bar graphs, line graphs, pictographs, stem and leaf plots, and Venn diagrams

Math Test

Name _____

Fill in the circle next to the correct answer.

Use this bar graph to answer Numbers 1 through 4.



1. How many hours in all did Jeremy watch TV during the six days on the graph?

Ⓐ 2 Ⓑ 4 Ⓒ 6 Ⓓ 9

2. On what day did he watch the least amount of TV?

Ⓐ Monday Ⓒ Wednesday
Ⓑ Tuesday Ⓓ Saturday

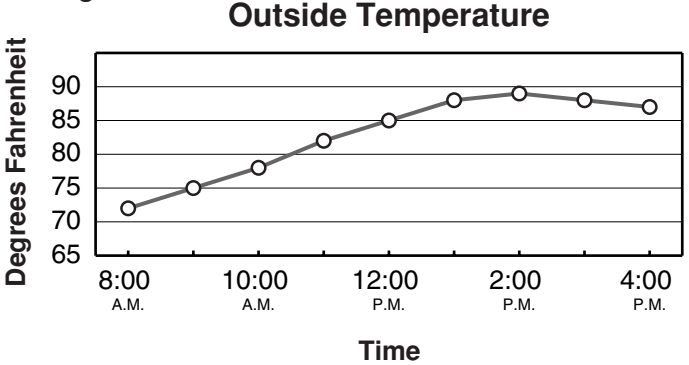
3. How much more TV did he watch on Wednesday compared to Tuesday?

Ⓐ twice as much Ⓒ $1\frac{1}{2}$ hours more
Ⓑ half as much Ⓓ 3 hours more

4. On which day did he watch the most TV?

Ⓐ Wednesday Ⓒ Friday
Ⓑ Thursday Ⓓ Saturday

Use this line graph to answer Numbers 5 through 8.



5. What was the outside temperature at 9:00 A.M.?

Ⓐ 60° Ⓑ 75° Ⓒ 72° Ⓓ 70°

6. About what was the temperature at 10:30 A.M.?

Ⓐ 70° Ⓑ 78° Ⓒ 80° Ⓓ 82°

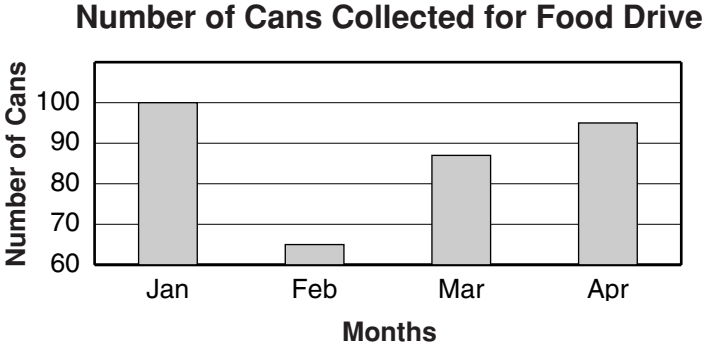
7. How much cooler was the temperature at 8:00 compared to 12:00?

Ⓐ 10° cooler Ⓒ 20° cooler
Ⓑ 5° cooler Ⓓ 13° cooler

8. At what time was the hottest temperature?

Ⓐ 2:00 P.M. Ⓒ 11:00 A.M.
Ⓑ 8:00 A.M. Ⓓ 4:00 P.M.

Use this bar graph to answer Numbers 9 and 10.



9. How many cans of food were collected in March?

_____

10. Why does it look like almost no cans were collected during the month of February?

_____

Interpret bar graphs, line graphs, pictographs, stem and leaf plots, and Venn diagrams

Asking Questions

Name _____

Good survey questions are clear and unbiased. Cut out the puzzle pieces with good survey questions. Put those pieces together to form a rectangle.

1. In what state were you born?

2. Do you enjoy listening to rock music like everyone else?

3. In what year were you born?

4. What is your favorite flavor of ice cream?

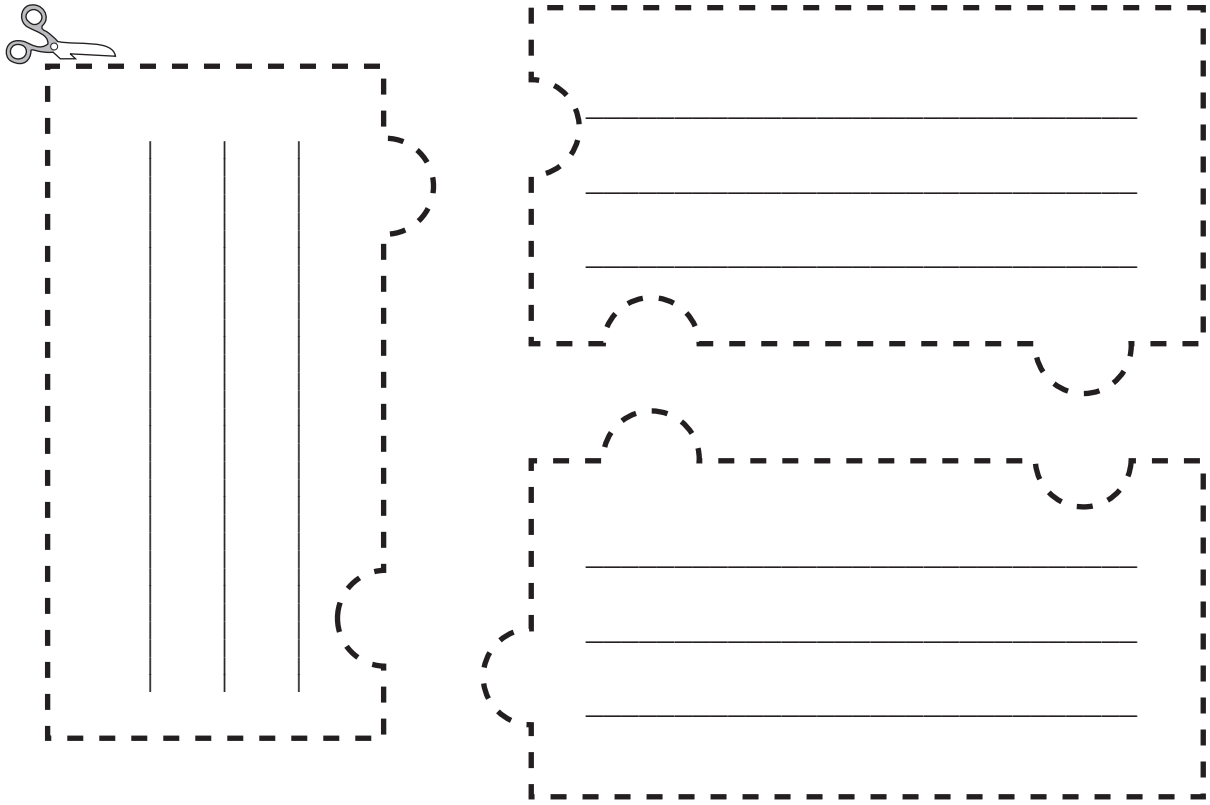
5. Should your city allow kids to ride dangerous skateboards?

Create and critique survey questions

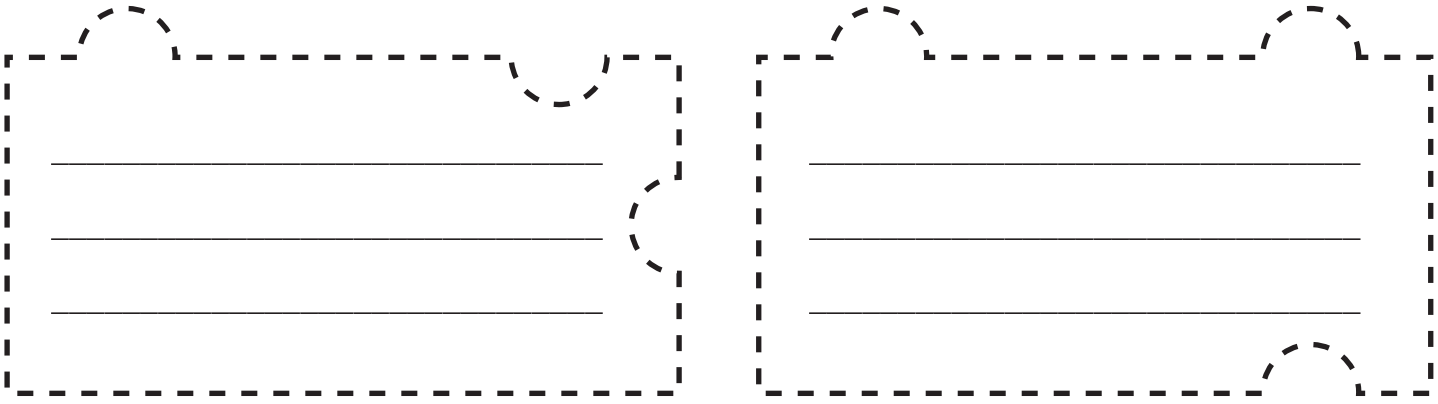
Make Your Own Puzzle

Name _____

1. Write a good survey question on each of these puzzle pieces.



2. Write a biased or unclear survey question on each of these puzzle pieces.



3. Cut out all the puzzle pieces and give them to a friend. Have your friend identify the good survey questions and put those pieces together to make a rectangle.

Create and critique survey questions

Writing Survey Questions

Name _____

When writing survey questions, we must watch out for our own feelings and biases. We don't want them to come through in the questions that we ask. Circle the words in each question below that are biased, and then write a similar question that could be asked without the bias.

1. What is your favorite soda? Is it grape like mine?

_____

2. Do you like the best football team in the world, the Denver Broncos?

_____

3. Do you agree with most people that girls are more athletic than boys?

_____

4. Should kids be allowed to endanger others by riding their bikes on the sidewalks?

_____

5. Do you like the wonderful band Hi Rocks?

_____

6. Should your city's water be supplied with the dangerous chemical fluoride?

_____

Create and critique survey questions

What Is Wrong?

Name _____

What is wrong with each of the following survey questions?

1. What is your favorite soda pop? Is it grape, orange, Coke, or Pepsi?

_____

2. I love my black Labrador dog that I have. What is your favorite kind of dog?

_____

3. Do you have brothers, or are you an only child?

_____

4. Do you go to the movies a lot?

_____

5. Do you watch TV more than the average kid?

_____

6. Are dogs better than cats?

_____

7. Is your bedroom in your house bigger than your friends'?

_____

8. If you found $20, would you not give it back to the owner?

_____

Create and critique survey questions

Collecting Data

Name _____

Select a topic that you would like to gather information about. Write five questions that you would ask each of your participants to gain information about your topic. (Remember to write clear questions that are free of your opinions or biases.)

Topic

_____

Question 1

_____

_____

Question 2

_____

_____

Question 3

_____

_____

Question 4

_____

_____

Question 5

_____

_____

Create and critique survey questions

Math Test

Name _____

Fill in the circle next to the correct answer.

1. Which of the following is a well-written question (clear and free from bias)?

Ⓐ In what year were you born?
Ⓑ Are you intelligent?
Ⓒ Do you have cats or pets?
Ⓓ Do you like the best team in the world, the Chargers?

2. Which of the following demonstrates a biased question?

Ⓐ What is your favorite flavor of ice cream?
Ⓑ Do you like my favorite teacher, Mrs. Jones?
Ⓒ Do you like chocolate?
Ⓓ What is your favorite color?

3. Which of the following questions is vaguely written?

Ⓐ Do you have any pets?
Ⓑ What is your last name?
Ⓒ Do you recycle aluminum cans?
Ⓓ Are you shorter?

4. What could be confusing about asking someone what his or her middle name is?

Ⓐ They use their middle name instead of their first name.
Ⓑ They don't have one.
Ⓒ They have more than one.
Ⓓ all of the above

5. What is vague about asking someone if they drink milk a lot?

Ⓐ The term "a lot" is not clear.
Ⓑ Some people don't like milk.
Ⓒ Some people drink milk every day.
Ⓓ Everyone likes milk and drinks it a lot.

6. What is biased about asking someone if our city should add the dangerous chemical fluoride to our drinking water?

Ⓐ Not everyone likes water.
Ⓑ The chemical fluoride is in our toothpaste.
Ⓒ The word **dangerous** makes them think that way just from hearing the question.
Ⓓ Some people don't use water.

7. What is the confusion about asking someone if they live with their mom or dad?

Ⓐ Some children might live with their grandparents.
Ⓑ Some children live with a guardian.
Ⓒ Some children live with both their mom and dad.
Ⓓ all of the above

8. Which of the following is the clearest question?

Ⓐ Do you like snakes or lizards?
Ⓑ Do you like chocolate or strawberry milk?
Ⓒ What is your favorite flavor of gum?
Ⓓ What is your favorite car or sport?

---

9. Make up a topic that you wish to create a survey about.

_____

10. Write three clear questions for the survey on the topic you selected above.

_____

_____

_____

Create and critique survey questions

Tongue Twister

Name _____

Use the following data to answer the questions below. Then write the corresponding letter on the line above the answer. The letters will spell out a tongue twister. Try to say it fast three times.

Data: 13, 35, 52, 56, 58, 64, 64, 74, 92

A How many numbers are listed in the data? 9

B What is the smallest number? _____

E What is the largest number? _____

I What is the range of the data (largest number minus the smallest number)? _____

L What is the mode (number that appears most often)? _____

M What is the median (middle number when listed in order)? _____

S When listed from smallest to largest, what is the second number? _____

T When listed from smallest to largest, what is the third number? _____

V When listed from smallest to largest, what is the eighth number? _____

						A									
64	92	52		64	9	58	92								
	A														
64	9	58	13	35		64	79	74	92						

Analyze data utilizing range, median, and mode

What Do Frogs Sit On?

Name _____

Use the following data to answer the questions below. Then write the corresponding letter on the line above the answer. The letters will spell out the solution to the riddle.

Data: 21, 23, 25, 25, 26, 27, 27, 27, 38

A What is the smallest number? 21

D What is the largest number? _____

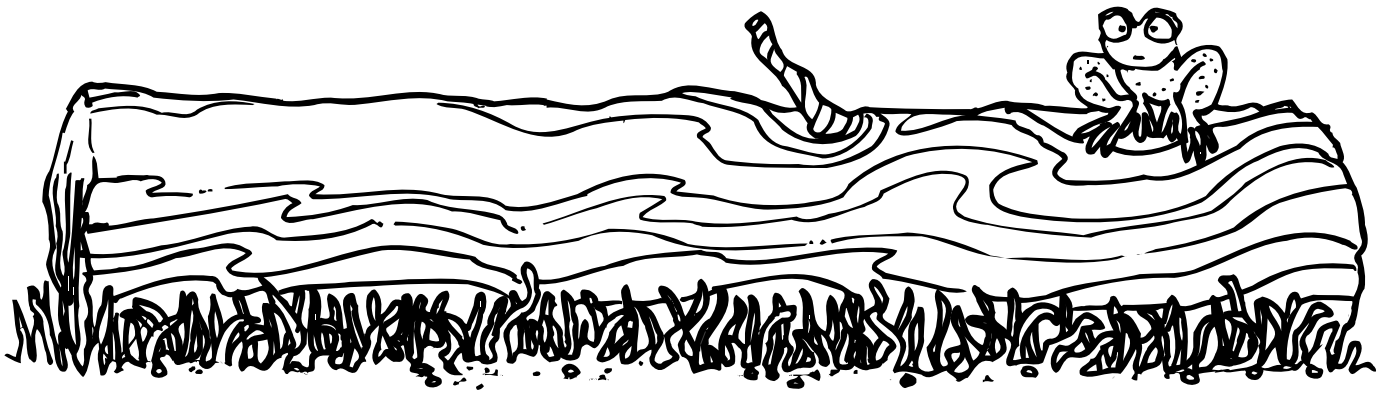
L What is the range of the data (largest number minus the smallest number)? _____

O How many numbers are listed in the data? _____

S What is the mode (number that appears most often)? _____

T What is the median (middle number when listed in order)? _____

		A							
26	9	21	38	27	26	9	9	17	27



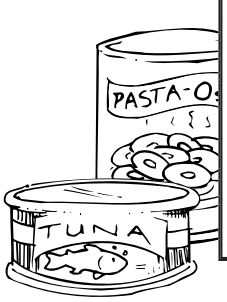
Analyze data utilizing range, median, and mode

Food Drive

Name _____

Mr. Higdon made a stem and leaf plot to show the number of cans of food that were collected by some classes during the food drive.

Stem	Leaves
4	2
5	1 3
6	5
7	2 3 4 6 6
8	2 2 2 4 4 4 5 6 8
9	2 4 4 4 5 6 6 7 7 8 8 8 8 9 9
10	0 0 0 1 5 7



Use the stem and leaf plot to answer the questions.

1. What was the fewest number of cans that a class collected for the food drive? _____

2. What was the largest number of cans that a class collected? _____

3. What is the mode (number that appears most often)? _____

4. How many classrooms in the school participated in the food drive? _____

5. What is the median (middle number when listed in order)? _____

6. What is the range (largest number minus the smallest number)? _____

Analyze data utilizing range, median, and mode

Using Data

Name _____

A number of adults were surveyed outside the city shopping center. One of the questions asked their age. Here are the results of that question:

19, 33, 53, 27, 33, 18, 45

1. What is the smallest number?

   _____

2. What is the largest number?

   _____

3. What is the range (largest number minus the smallest number)?

   _____

4. What is the mode (number that appears most often)?

   _____

5. What is the median (middle number when the list is in order)?

   _____

A number of students were asked how many hours of sleep they had during the last seven days. Here are their results:

40, 56, 55, 49, 60, 56, 42

6. What is the smallest number?

   _____

7. What is the largest number?

   _____

8. What is the range (largest number minus the smallest number)?

   _____

9. What is the mode (number that appears most often)?

   _____

10. What is the median (middle number when the list is in order)?

    _____

Analyze data utilizing range, median, and mode

Analyze the Data

Name _____

Use this list of data to answer the questions below.

13, 15, 16, 16, 17, 18, 18, 18, 19, 19, 21, 24, 25, 29

1. What one number could you add to the list so that the data would have a range of 60?

   _____

2. What is one of the two numbers you could add to the list above so that the data would have a second mode?

   _____

3. What two numbers could you add to the list of data that would increase the median value?

   _____ _____

4. Can you add two numbers less than 29 and still accomplish what you did in #3?

   _____

5. What effect would adding an 18 to the list of data have on the median, mode, or range?

   _____

Analyze data utilizing range, median, and mode

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, use this data.

25, 28, 29, 30, 31, 31, 35

1. What is the largest number?

Ⓐ 27
Ⓑ 31
Ⓒ 32
Ⓓ 35

2. What is the range?

Ⓐ 10
Ⓑ 12
Ⓒ 25
Ⓓ 32

3. What is the mode (number that appears most often)?

Ⓐ 30
Ⓑ 31
Ⓒ 32
Ⓓ 35

4. What is the median (middle number when listed in order)?

Ⓐ 29
Ⓑ 30
Ⓒ 31
Ⓓ 32

For Numbers 5 through 8, use this stem and leaf plot.

Stem (tens)	Leaves (ones)
8	2 4
9	8 8 8
10	0

5. How many test scores are represented?

Ⓐ 6
Ⓑ 5
Ⓒ 25
Ⓓ 15

6. What is the lowest test score?

Ⓐ 0
Ⓑ 24
Ⓒ 82
Ⓓ 8

7. What is the highest test score?

Ⓐ 65
Ⓑ 99
Ⓒ 100
Ⓓ 888

8. What is the mode (number that appears most often)?

Ⓐ 84
Ⓑ 100
Ⓒ 96
Ⓓ 98

9. List five numbers that would have a median value of 95.

_____ _____ _____ _____ _____

10. List three numbers that would have a mode of 16.

_____ _____ _____

Analyze data utilizing range, median, and mode

Spinner Game 1

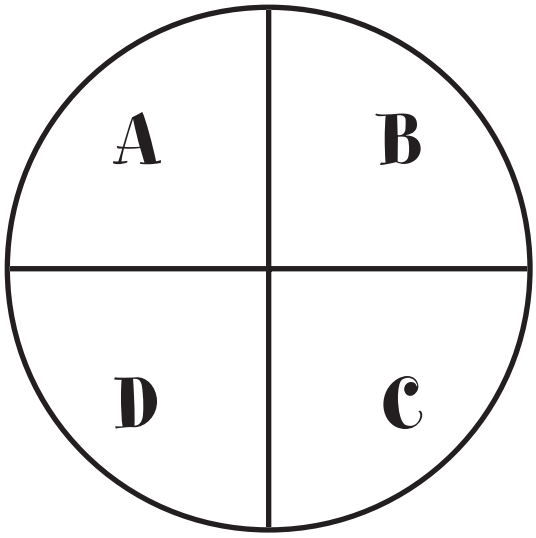
Name _____

Use the spinner below to play this game. To begin, obtain a paper clip from your teacher. Stick the pointed end of your pencil through the small loop in the end of the paper clip and place the point of the pencil on the center of the spinner. This allows the paper clip to spin around freely and become the spinner.

Rules

1. If the spinner lands on A or C, player 1 gets a point.
2. If the spinner lands on B or D, player 2 gets a point.

The player with the most points after 20 turns is the **winner!**



Turn	Landed On	Point(s) for Player 1	Point(s) for Player 2
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
	Total		

Challenge

If you add the following rule, does it change the game to give one player an advantage over the other?

_____

_____

3. If you land on the letter C, no matter which player you are, you get to spin again. (Player 1 would score a point for landing on C and get a second turn; however, player 2 would not score a point, but would still spin again.)

Collect and record data related to simple chance situations

Spinner Game 2

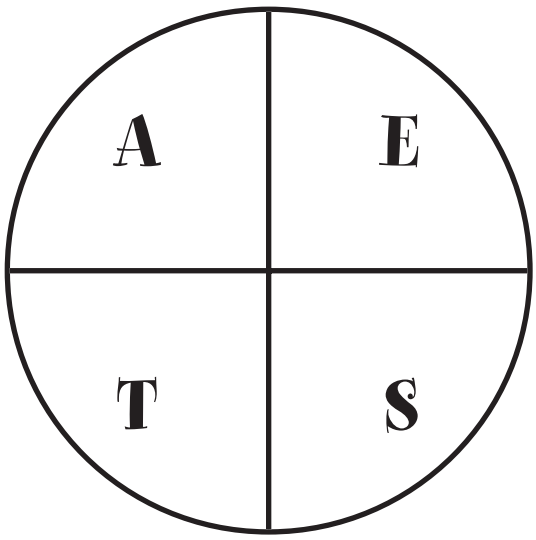
Name _____

Use the spinner below to play this game. To begin, obtain a paper clip from your teacher. Stick the pointed end of your pencil through the small loop in the end of the paper clip and place the point of the pencil on the center of the spinner. This allows the paper clip to spin around freely and become the spinner.

Rules

1. If the spinner lands on a vowel, player 1 gets a point.
2. If the spinner lands on a consonant, player 2 gets a point.

Keep track of 20 turns and see who has the most points.



Turn	Landed On	Point(s) for Player 1	Point(s) for Player 2
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
	Total		

Challenge

If you add the following rules, does it change the game to give one player an advantage over the other?

_____

_____

3. If player 1 lands on A or E, he or she gets two points.
4. If player 2 lands on T, he or she gets one point.
5. If player 2 lands on S, he or she gets three points.

Collect and record data related to simple chance situations

Flip a Coin

Name _____

Use a coin for the following experiment.

Flip the coin 4 times and use tally marks to record your outcomes in this table.

Heads	
Tails	

Now flip the coin 30 times and use tally marks to record your outcomes in this table.

Heads	
Tails	

Answer these questions:

1. Did your experiments come out to half of the turns being heads and half being tails?

_____

2. If you were off by one or two in the first experiment, how is that different from being off by one or two in the second experiment?

_____

3. The second experiment has a sample of 30, while the first experiment has a sample of 4. What is important about the size of the sample you are taking?

_____

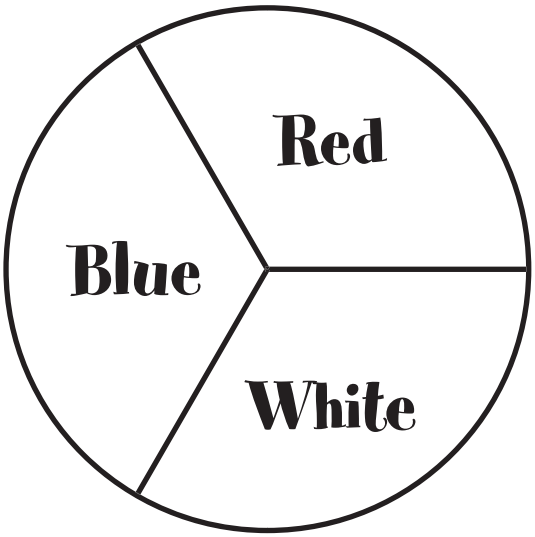
Collect and record data related to simple chance situations

Use the Spinner

Name _____

Use the spinner below to play this game. To begin, obtain a paper clip from your teacher. Stick the pointed end of your pencil through the small loop in the end of the paper clip and place the point of the pencil on the center of the spinner. This allows the paper clip to spin around freely and become the spinner.

Spin the spinner 20 times, and keep track of your turns on the chart.



Turn Number	Red	White	Blue
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

1. How many times did the spinner land on red? _____

2. How many times did the spinner land on white? _____

3. How many times did the spinner land on blue? _____

4. Do you think these results are the same as your classmates'? Why or why not?

_____

Collect and record data related to simple chance situations

Create a Spinner

Name _____

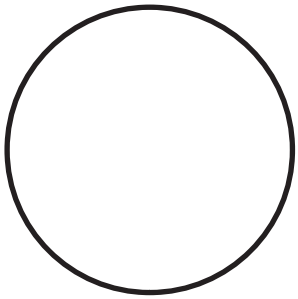
Use these four rules to draw the spinners requested in each of the problems below.

Rules

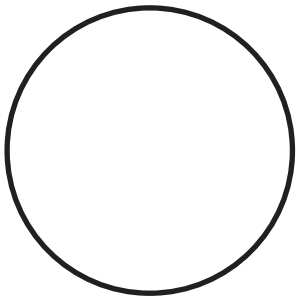
1. The spinner has three regions, labeled A, B, and C.
2. Player 1 gets a point if either player lands on A during any turn.
3. Player 2 gets a point if either player lands on B or C during any turn.
4. Each player will spin the spinner 10 times.

Problems

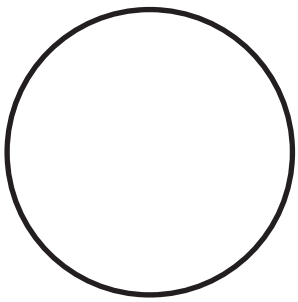
1. Create a spinner that would give the two players equal chances of winning using the four rules.



2. Create a spinner that would give player 1 the advantage using the four rules.



3. Create a spinner that would give player 2 the advantage using the four rules.



Collect and record data related to simple chance situations

Note: This assessment does not follow the multiple-choice format.

Name _____

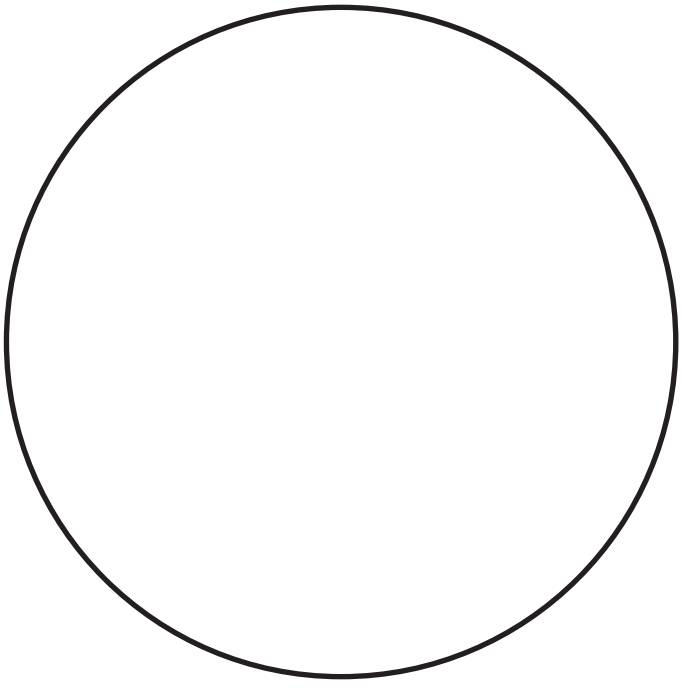
Math Test

1. Use a standard six-sided die and roll it 30 times, recording your results in this table:

Number on Die	Tally Marks Showing Frequency	Total Frequency
1		
2		
3		
4		
5		
6		

2. Draw a spinner that satisfies all the following conditions:

- The spinner has four regions.
- The regions are numbered 2, 3, 4, and 5.
- Regions 2 and 5 are the same size.
- The chances of getting an even number are larger than the chances of getting an odd number.



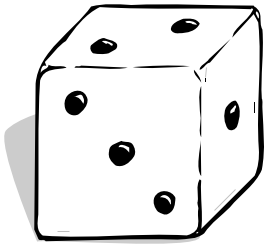
Collect and record data related to simple chance situations

Tongue Twister

Name _____

Look at each of the figures below and find the probability. Look for that value at the bottom of the page and write the corresponding letter on the line above the value. The letters will spell out a tongue twister. Try to say it fast three times.

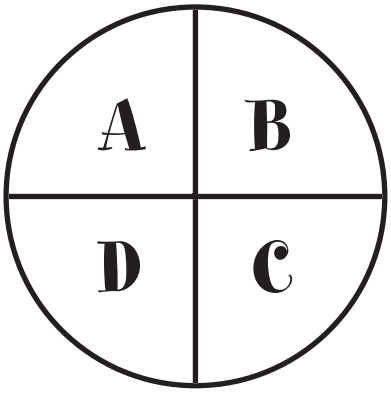
On the standard six-sided die:



N *P*(one)

P *P*(even number)

On the spinner:



D *P*(A)

E *P*(consonant)

K *P*(E)

	N							,
0	$\frac{1}{6}$	$\frac{3}{4}$	0.75		$\frac{1}{4}$	0.75	$\frac{3}{4}$	$\frac{3}{6}$
						N		.
0.25	0.75	$\frac{3}{4}$	$\frac{1}{2}$		0	$\frac{1}{6}$	$\frac{3}{4}$	0.75

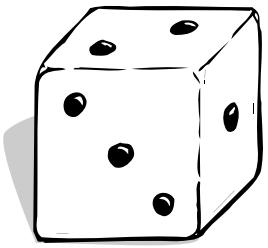
Compute theoretical probabilities for simple chance events

What Kind of Nut Has No Shell?

Name _____

To solve the riddle, look at each of the figures below and compute the probability. Look for that value at the bottom of the page and write the corresponding letter on the line above the value. The letters will spell out the solution to the riddle.

On the standard six-sided die:

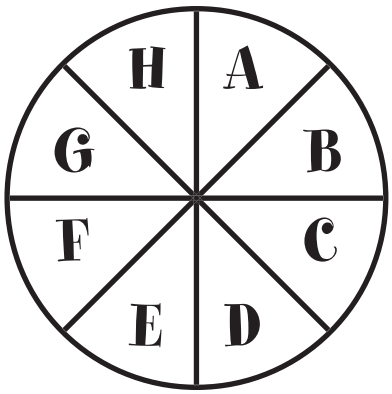


D *P*(three)

G *P*(odd number)

H *P*(seven)

On the spinner:



N *P*(A)

O *P*(vowel)

S *P*(consonant)

T *P*(A, B, C, D, or E)

U *P*(D, E, or F)

D								
$\frac{1}{6}$	$\frac{2}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	0	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{6}{8}$

Skill practice copy here

Find the Probability

Name _____

Determine the probability of each event.

When rolling a standard six-sided die, what is the probability of getting...?

1. a 3 _____

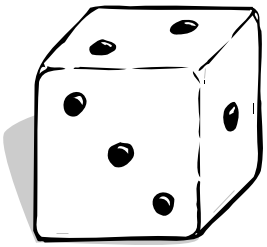
2. a 5 _____

3. a 1 or a 2 _____

4. an odd number _____

5. an even number _____

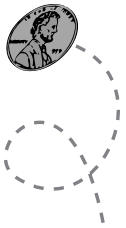
6. a 7 _____



When you are flipping a coin, what is the probability of getting...?

7. heads _____

8. tails _____



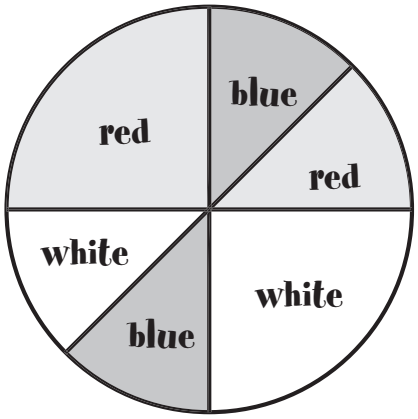
When you are spinning this spinner, what is the probability of getting...?

9. red _____

10. blue _____

11. orange _____

12. blue or white _____



Compute theoretical probabilities for simple chance events

Probability

Name _____

Determine the probability of each event.

When rolling a standard six-sided die, what is the probability of getting...?

1. a 1 _____

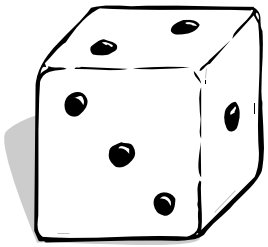
2. a 4 _____

3. a 5 or a 6 _____

4. an odd number _____

5. an even number _____

6. a 0 _____

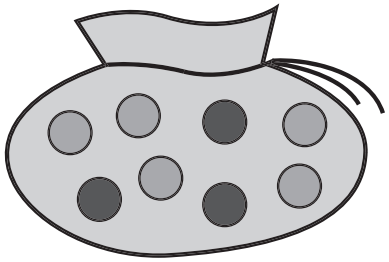


If you had a bag with three blue marbles and five red marbles inside, what is the probability of drawing...?

7. a red marble _____

8. a blue marble _____

9. a black marble _____

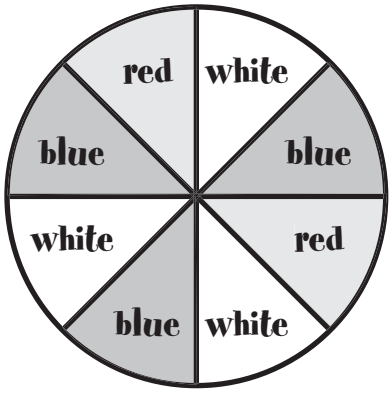


When you are spinning this spinner, what is the probability of getting...?

10. white _____

11. blue _____

12. red _____



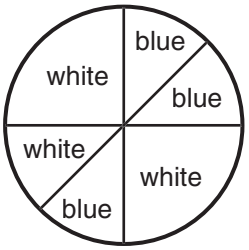
Compute theoretical probabilities for simple chance events

Using Probability

Name _____

Solve each problem.

1. Ryan and Beth are arguing about the spinner. Ryan says that the white and blue have the same chance of being spun because they each have three sections on the spinner. However, Beth thinks that the white sections are larger so that they have a better chance of being spun. Who is correct? Tell why.



_____

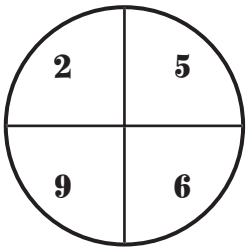
2. In Mr. Call's class, there are 28 students. Mr. Call has each student's name written on a popsicle stick and placed in a jar. Occasionally, Mr. Call will reach into the jar and pull out a stick and ask that person to answer the next question. What are the chances that Michael will have his name pulled out of the jar the first time?

_____

3. In the jar described in #2, Mr. Call has called three students so far. Each time he calls on someone, he keeps that stick out of the jar so that person doesn't get called on again. What is Toby's chance of being drawn as the fourth student?

_____

4. Raymond and Julia are debating if the spinner to the right is a fair spinner. Fairness is defined as the two players having the same chances of winning. The rules for this spinner state that if the spinner lands on an even number, then Player A gets to move one space. If the spinner lands on an odd number, then Player B gets to move one space. Do you think that this is a fair spinner? Why or why not?



_____

5. Using the same spinner in #4, the rules now say that Player A gets to move if the spinner lands on an even number and he moves the number of spaces the spinner lands on. Player B gets to move if the spinner lands on an odd number and he moves the number of spaces the spinner lands on. Is this a fair game? Why or why not?

_____

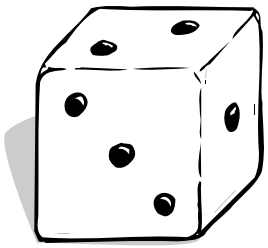
Compute theoretical probabilities for simple chance events

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, use a standard six-sided die.



1. What is the probability of rolling a 6?

Ⓐ $\frac{1}{2}$ Ⓑ $\frac{1}{3}$ Ⓒ $\frac{1}{4}$ Ⓓ $\frac{1}{6}$

2. What is the probability of rolling a 4 or a 5?

Ⓐ $\frac{1}{6}$ Ⓑ $\frac{1}{2}$ Ⓒ $\frac{1}{3}$ Ⓓ $\frac{1}{4}$

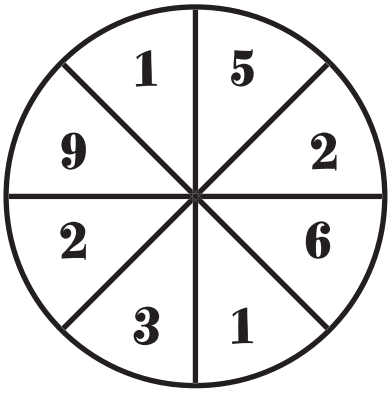
3. What is the probability of rolling a 7?

Ⓐ $\frac{1}{6}$ Ⓑ $\frac{1}{4}$ Ⓒ 0 Ⓓ $\frac{1}{2}$

4. What is the probability of rolling an even number?

Ⓐ $\frac{1}{2}$ Ⓑ $\frac{1}{3}$ Ⓒ $\frac{1}{4}$ Ⓓ $\frac{1}{6}$

For Numbers 5 through 8, use this spinner.



5. What is the probability of spinning a 1?

Ⓐ $\frac{1}{8}$ Ⓑ $\frac{1}{6}$ Ⓒ $\frac{2}{6}$ Ⓓ $\frac{1}{4}$

6. What is the probability of spinning a 4?

Ⓐ 0 Ⓑ $\frac{1}{8}$ Ⓒ $\frac{1}{4}$ Ⓓ $\frac{1}{2}$

7. What is the probability of spinning a 2?

Ⓐ $\frac{1}{8}$ Ⓑ $\frac{1}{2}$ Ⓒ $\frac{2}{8}$ Ⓓ $\frac{2}{6}$

8. What is the probability of spinning a 3?

Ⓐ $\frac{1}{4}$ Ⓑ $\frac{1}{8}$ Ⓒ $\frac{1}{7}$ Ⓓ 0

9. Using a coin, what is the probability of flipping a heads?

_____

10. Mrs. Vierow has an envelope in which she has cards. On each card is written the name of one of the 25 students in her class. She has already drawn three students' cards, including Timmy's, Julie's, and Kiko's. What is the chance that the next card she draws will be Antonio's?

_____

Compute theoretical probabilities for simple chance events

How Many Combinations?

Name _____

Draw all the possible outfits that Daniel could wear given the following choices for shirts and pants. Each outfit must consist of one shirt and one pair of pants.

Three possible shirts:		Four possible pairs of pants:	
red	blue	blue jeans	white pants
white		black jeans	red pants

Use counting techniques, tree charts, and organized lists to determine all possible combinations of items

What's an Astronaut's Favorite Meal of the Day?

Name _____

To solve this riddle, utilize the counting principle to solve the questions below. The **counting principle** says that if one event can happen in 2 different ways and a second event can happen in 4 different ways, then the two can occur together in 8 (2 times 4) different ways. For example, if Sally has 4 different pairs of pants and 3 different colored shirts, then she can create 12 unique outfits with those pants and shirts (4 times 3).

After you have solved each question, look for the answer at the bottom of the page and write the corresponding letter on the line above the answer. The letters will spell out the solution to the riddle.

A The number of outfits if Jim has three shirts and four pairs of pants

C The number of outfits if Alex has five shirts and four pairs of pants

H The number of cards that can be made with four different colors of paper and four different colors of markers

L The number of one-scoop ice-cream cones with four flavors of ice cream and two types of cones

N The number of ice-cream sundaes that can be made with five flavors of ice cream and 5 toppings

U The number of ways Sally can wear her hair with three different styles and five different-colored hair clips

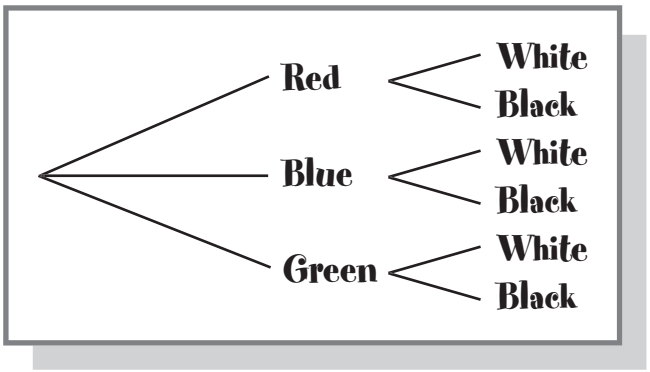
8	12	15	25	20	16

Use counting techniques, tree charts, and organized lists to determine all possible combinations of items

Tree Diagrams

Name _____

Draw a **tree diagram** for each of the following situations and tell how many combinations there are for each. Here is an example of a tree diagram to help demonstrate the number of outfits that could be created from three pairs of pants (red, blue, and green) and two shirts (white and black). Each "branch" lists one possible outfit. For example, the top branch shows the outfit with red pants and white shirt. There are a total of six different outfits on this tree diagram.



1. Two types of ice-cream cones (sugar and plain) and three flavors of ice cream (chocolate, vanilla, and swirl)

2. Three colors of balloons (red, blue, and purple) and three colors of ribbon (white, green, and yellow)

3. Three sizes of drinks (small, medium, and large) and four flavors of drinks (grape, orange, root beer, and lemon-lime)

Use counting techniques, tree charts, and organized lists to determine all possible combinations of items

Counting Techniques

Name _____

1. Draw a tree diagram to represent the six possible outcomes on a standard six-sided die.

2. Make an organized list to represent the possible combinations of a game in which the players use a spinner and a die. The spinner has three sections with the letters A, B, and C in them. The die is a standard six-sided die.

3. Henry was getting ready in the morning and noticed that he had four shirts in his closet (red, blue, green, and plaid) as well as three pairs of shorts (denim, white, and black). How many different combinations of one shirt and one pair of shorts can Henry wear?

_____

4. In some games, such as Monopoly, there are advantages to rolling doubles. If a game has two dice, what are all the possible combinations of the two dice? What is the probability of rolling doubles (when both dice show the same number)?

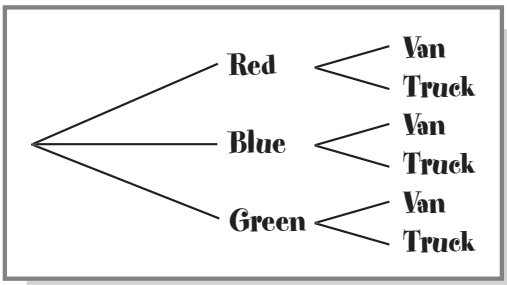
_____

Use counting techniques, tree charts, and organized lists to determine all possible combinations of items

How Many?

Name _____

There are six possible combinations from a car dealership if there are three colors (red, blue, and green) and two types of vehicles (vans and trucks).



1. Add one more trait to make eight possible combinations. Draw the new tree diagram.

2. Add one more trait to make nine possible combinations. Draw the new tree diagram.

3. Add two more traits to make twelve possible combinations. Draw the new tree diagram below or use another sheet of paper.

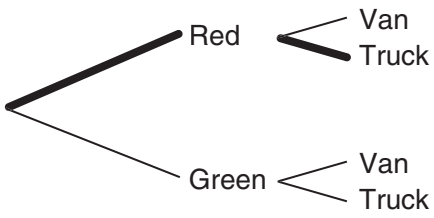
Use counting techniques, tree charts, and organized lists to determine all possible combinations of items

Math Test

Name _____

Fill in the circle next to the correct answer.

For Numbers 1 through 4, use this tree diagram.



1. What are the two traits?

Ⓐ color and type of vehicle
Ⓑ red and green
Ⓒ van and truck
Ⓓ color and size

2. What does the dark set of lines represent?

Ⓐ a red van Ⓒ a red truck
Ⓑ a green truck Ⓓ a green van

3. How many combinations are there of the two colors and two types of vehicles?

Ⓐ 1 Ⓑ 2 Ⓒ 3 Ⓓ 4

4. If you added a third color to the diagram, how many different combinations would there be for the three colors and the two types of vehicles?

Ⓐ 4 Ⓑ 6 Ⓒ 8 Ⓓ 10

For Numbers 5 through 8, use the organized list.

Shirt	Pants
Red	Blue jeans
Red	White slacks
Red	Black jeans
Red	Faded blue jeans
Blue	Blue jeans
Blue	White slacks
Blue	Black jeans
Blue	Faded blue jeans

5. What does the table represent?

Ⓐ flavors of ice cream
Ⓑ shirts and pants that could be worn
Ⓒ colors of cars
Ⓓ colors of socks

6. How many shirts does the organized list represent?

Ⓐ 1 Ⓑ 2 Ⓒ 3 Ⓓ 4

7. How many pairs of pants does the organized list represent?

Ⓐ 1 Ⓑ 2 Ⓒ 3 Ⓓ 4

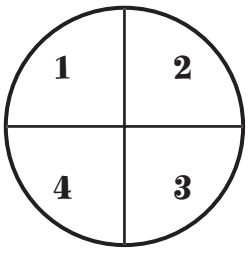
8. How many combinations are represented in the list?

Ⓐ 2 Ⓑ 4 Ⓒ 6 Ⓓ 8

9. If Shirley is rolling two dice (one red and one green), how many possible sums could she get?

_____

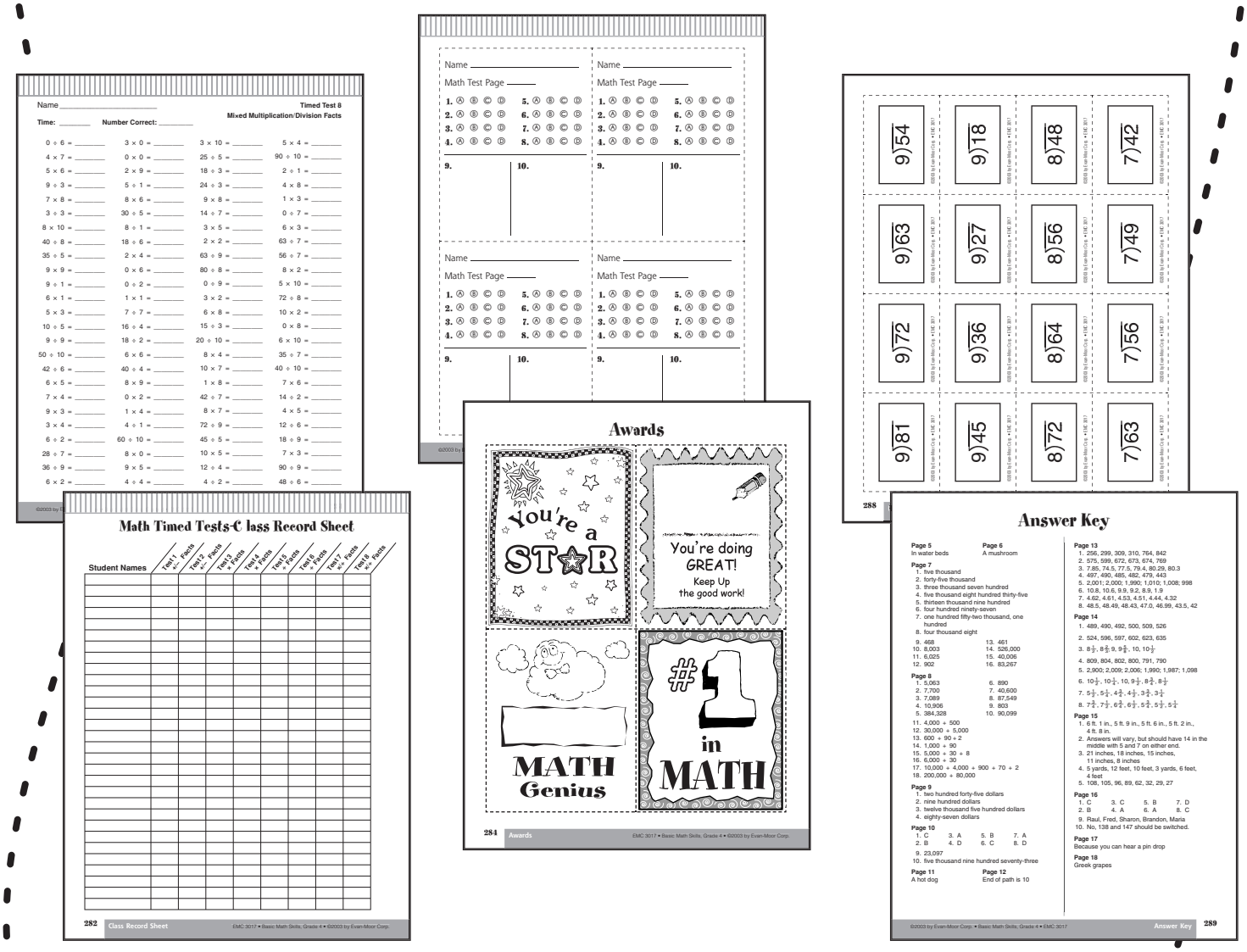
10. Johnny is spinning this spinner two times. Show all the possible sums he could get with the two spins.



_____

Use counting techniques, tree charts, and organized lists to determine all possible combinations of items

Resources



Name _____

Timed Test 1

Addition/Subtraction Facts

Time: _____ **Number Correct:** _____

6 + 4 = _____	4 − 2 = _____	3 − 1 = _____	11 − 9 = _____
8 + 3 = _____	10 − 7 = _____	5 + 3 = _____	4 − 4 = _____
9 − 4 = _____	14 − 4 = _____	15 − 8 = _____	1 + 7 = _____
8 + 2 = _____	7 + 8 = _____	6 + 0 = _____	0 + 10 = _____
9 + 3 = _____	16 − 7 = _____	5 − 1 = _____	0 − 0 = _____
2 + 9 = _____	7 + 9 = _____	3 + 5 = _____	12 − 5 = _____
11 − 5 = _____	9 − 6 = _____	9 − 3 = _____	9 − 1 = _____
18 − 9 = _____	2 + 6 = _____	8 − 5 = _____	9 + 7 = _____
12 − 9 = _____	1 + 10 = _____	3 − 3 = _____	5 + 2 = _____
3 + 2 = _____	10 − 3 = _____	10 + 8 = _____	7 − 1 = _____
1 + 5 = _____	19 − 10 = _____	1 + 6 = _____	2 + 4 = _____
8 − 3 = _____	8 + 8 = _____	4 − 1 = _____	11 − 7 = _____
7 + 5 = _____	10 + 6 = _____	5 − 0 = _____	1 + 8 = _____
9 − 2 = _____	2 + 3 = _____	4 + 8 = _____	12 − 8 = _____
8 − 0 = _____	5 − 3 = _____	10 − 0 = _____	4 + 6 = _____
10 + 3 = _____	7 − 7 = _____	4 + 10 = _____	17 − 9 = _____
12 − 7 = _____	8 − 1 = _____	19 − 9 = _____	8 + 4 = _____
4 + 1 = _____	18 − 8 = _____	8 + 6 = _____	11 − 1 = _____
9 + 5 = _____	4 + 5 = _____	9 − 5 = _____	5 − 4 = _____
3 + 9 = _____	2 + 2 = _____	5 + 10 = _____	6 + 7 = _____
7 − 6 = _____	7 − 4 = _____	7 − 3 = _____	3 + 0 = _____
10 − 10 = _____	12 − 3 = _____	14 − 6 = _____	9 − 7 = _____
5 + 6 = _____	15 − 9 = _____	7 + 7 = _____	1 + 9 = _____
0 + 8 = _____	5 + 8 = _____	9 + 10 = _____	11 − 6 = _____
10 + 10 = _____	10 + 0 = _____	5 − 2 = _____	16 − 6 = _____

Name _____

Timed Test 2

Addition/Subtraction Facts

Time: _____ **Number Correct:** _____

3 + 7 = _____	13 − 7 = _____	10 − 6 = _____	10 − 1 = _____
6 + 10 = _____	17 − 10 = _____	1 + 0 = _____	10 + 4 = _____
15 − 10 = _____	8 + 10 = _____	1 − 0 = _____	6 + 5 = _____
7 − 5 = _____	2 + 8 = _____	6 − 1 = _____	10 − 5 = _____
0 + 4 = _____	5 + 4 = _____	2 + 7 = _____	17 − 8 = _____
3 − 2 = _____	6 − 3 = _____	6 + 2 = _____	4 + 4 = _____
7 + 2 = _____	1 + 2 = _____	12 − 4 = _____	13 − 3 = _____
15 − 7 = _____	10 − 9 = _____	2 − 2 = _____	9 + 2 = _____
0 + 1 = _____	13 − 6 = _____	13 − 10 = _____	15 − 5 = _____
8 − 4 = _____	18 − 10 = _____	11 − 10 = _____	1 + 4 = _____
0 + 9 = _____	6 + 6 = _____	6 − 6 = _____	10 − 8 = _____
4 − 3 = _____	4 + 3 = _____	11 − 3 = _____	16 − 10 = _____
6 − 2 = _____	6 − 4 = _____	7 + 3 = _____	2 + 1 = _____
3 + 4 = _____	9 − 9 = _____	3 + 8 = _____	7 + 10 = _____
5 + 0 = _____	0 + 0 = _____	10 + 1 = _____	6 − 0 = _____
6 + 9 = _____	4 + 9 = _____	9 + 8 = _____	9 + 4 = _____
10 − 4 = _____	8 + 1 = _____	14 − 5 = _____	15 − 6 = _____
7 + 6 = _____	5 + 9 = _____	12 − 2 = _____	14 − 9 = _____
10 − 2 = _____	7 − 2 = _____	3 + 6 = _____	10 + 5 = _____
9 + 9 = _____	9 − 8 = _____	2 − 1 = _____	6 + 8 = _____
7 + 0 = _____	0 + 7 = _____	14 − 10 = _____	13 − 5 = _____
2 + 10 = _____	9 + 0 = _____	3 + 10 = _____	2 + 0 = _____
6 − 5 = _____	8 − 2 = _____	5 + 5 = _____	13 − 9 = _____
0 + 6 = _____	16 − 9 = _____	14 − 8 = _____	0 + 5 = _____
3 − 0 = _____	5 + 7 = _____	3 + 1 = _____	11 − 4 = _____

Name _____

Timed Test 3
Multiplication Facts

Time: _____ **Number Correct:** _____

5 × 6 = _____	10 × 10 = _____	4 × 4 = _____	0 × 4 = _____
9 × 0 = _____	8 × 3 = _____	1 × 2 = _____	7 × 0 = _____
3 × 9 = _____	5 × 9 = _____	0 × 10 = _____	6 × 6 = _____
6 × 7 = _____	2 × 1 = _____	7 × 6 = _____	9 × 7 = _____
4 × 6 = _____	0 × 5 = _____	6 × 4 = _____	8 × 10 = _____
3 × 2 = _____	5 × 4 = _____	3 × 6 = _____	5 × 5 = _____
7 × 4 = _____	10 × 2 = _____	2 × 10 = _____	7 × 9 = _____
9 × 5 = _____	1 × 6 = _____	0 × 6 = _____	10 × 4 = _____
3 × 8 = _____	0 × 2 = _____	3 × 0 = _____	6 × 9 = _____
6 × 2 = _____	7 × 1 = _____	7 × 7 = _____	2 × 0 = _____
2 × 3 = _____	8 × 5 = _____	9 × 6 = _____	2 × 9 = _____
4 × 5 = _____	9 × 8 = _____	10 × 8 = _____	6 × 3 = _____
8 × 6 = _____	1 × 9 = _____	8 × 1 = _____	10 × 0 = _____
2 × 7 = _____	10 × 6 = _____	4 × 3 = _____	3 × 10 = _____
5 × 1 = _____	3 × 5 = _____	6 × 8 = _____	1 × 3 = _____
7 × 10 = _____	4 × 10 = _____	7 × 2 = _____	5 × 2 = _____
1 × 0 = _____	1 × 4 = _____	3 × 4 = _____	9 × 1 = _____
4 × 8 = _____	5 × 7 = _____	0 × 1 = _____	6 × 10 = _____
7 × 3 = _____	8 × 9 = _____	4 × 0 = _____	8 × 7 = _____
2 × 5 = _____	6 × 1 = _____	10 × 5 = _____	9 × 4 = _____
0 × 8 = _____	3 × 3 = _____	5 × 8 = _____	8 × 8 = _____
7 × 5 = _____	6 × 0 = _____	6 × 5 = _____	0 × 9 = _____
4 × 2 = _____	3 × 7 = _____	8 × 4 = _____	2 × 4 = _____
2 × 6 = _____	5 × 10 = _____	2 × 8 = _____	9 × 9 = _____
7 × 8 = _____	9 × 3 = _____	2 × 2 = _____	4 × 1 = _____

Name _____

Timed Test 4
Multiplication Facts

Time: _____ **Number Correct:** _____

8 × 6 = _____	0 × 0 = _____	8 × 1 = _____	5 × 6 = _____
9 × 1 = _____	2 × 1 = _____	5 × 1 = _____	6 × 10 = _____
8 × 5 = _____	6 × 8 = _____	2 × 6 = _____	8 × 7 = _____
7 × 7 = _____	8 × 3 = _____	1 × 7 = _____	9 × 9 = _____
4 × 6 = _____	4 × 2 = _____	3 × 9 = _____	10 × 2 = _____
6 × 3 = _____	1 × 9 = _____	4 × 8 = _____	5 × 4 = _____
2 × 8 = _____	4 × 4 = _____	6 × 7 = _____	2 × 2 = _____
6 × 6 = _____	5 × 7 = _____	7 × 5 = _____	1 × 4 = _____
1 × 0 = _____	7 × 1 = _____	9 × 6 = _____	1 × 1 = _____
10 × 3 = _____	9 × 4 = _____	10 × 4 = _____	2 × 0 = _____
3 × 1 = _____	10 × 8 = _____	10 × 10 = _____	6 × 2 = _____
0 × 3 = _____	0 × 5 = _____	2 × 3 = _____	6 × 5 = _____
1 × 5 = _____	1 × 3 = _____	1 × 6 = _____	8 × 0 = _____
5 × 3 = _____	4 × 0 = _____	0 × 9 = _____	9 × 5 = _____
8 × 2 = _____	5 × 5 = _____	4 × 5 = _____	9 × 8 = _____
9 × 10 = _____	6 × 4 = _____	5 × 2 = _____	3 × 10 = _____
5 × 8 = _____	7 × 2 = _____	8 × 4 = _____	9 × 0 = _____
2 × 4 = _____	8 × 9 = _____	9 × 7 = _____	4 × 1 = _____
6 × 0 = _____	4 × 7 = _____	9 × 2 = _____	3 × 8 = _____
2 × 7 = _____	3 × 6 = _____	10 × 1 = _____	10 × 0 = _____
4 × 10 = _____	3 × 3 = _____	2 × 5 = _____	10 × 5 = _____
7 × 4 = _____	2 × 9 = _____	1 × 8 = _____	6 × 9 = _____
3 × 2 = _____	1 × 10 = _____	0 × 10 = _____	7 × 6 = _____
0 × 7 = _____	5 × 9 = _____	3 × 5 = _____	2 × 10 = _____
10 × 6 = _____	7 × 10 = _____	4 × 3 = _____	7 × 3 = _____

Name _____

Timed Test 5
Division Facts

Time: _____ **Number Correct:** _____

20 ÷ 5 = _____	2 ÷ 2 = _____	4 ÷ 2 = _____	50 ÷ 5 = _____
18 ÷ 3 = _____	0 ÷ 9 = _____	56 ÷ 8 = _____	35 ÷ 5 = _____
28 ÷ 4 = _____	9 ÷ 9 = _____	80 ÷ 8 = _____	54 ÷ 9 = _____
16 ÷ 2 = _____	4 ÷ 1 = _____	27 ÷ 3 = _____	28 ÷ 7 = _____
9 ÷ 1 = _____	12 ÷ 2 = _____	7 ÷ 1 = _____	24 ÷ 8 = _____
14 ÷ 7 = _____	20 ÷ 2 = _____	10 ÷ 5 = _____	6 ÷ 6 = _____
32 ÷ 8 = _____	36 ÷ 4 = _____	7 ÷ 7 = _____	60 ÷ 10 = _____
27 ÷ 9 = _____	30 ÷ 5 = _____	90 ÷ 10 = _____	24 ÷ 4 = _____
10 ÷ 2 = _____	24 ÷ 6 = _____	45 ÷ 5 = _____	8 ÷ 1 = _____
9 ÷ 3 = _____	15 ÷ 5 = _____	48 ÷ 6 = _____	18 ÷ 2 = _____
4 ÷ 4 = _____	0 ÷ 3 = _____	35 ÷ 7 = _____	21 ÷ 3 = _____
12 ÷ 6 = _____	20 ÷ 10 = _____	36 ÷ 6 = _____	72 ÷ 8 = _____
21 ÷ 7 = _____	40 ÷ 8 = _____	49 ÷ 7 = _____	40 ÷ 4 = _____
20 ÷ 4 = _____	63 ÷ 9 = _____	25 ÷ 5 = _____	8 ÷ 4 = _____
14 ÷ 2 = _____	81 ÷ 9 = _____	45 ÷ 9 = _____	3 ÷ 3 = _____
40 ÷ 5 = _____	24 ÷ 3 = _____	70 ÷ 10 = _____	0 ÷ 10 = _____
63 ÷ 7 = _____	12 ÷ 3 = _____	64 ÷ 8 = _____	18 ÷ 6 = _____
60 ÷ 6 = _____	5 ÷ 5 = _____	54 ÷ 6 = _____	8 ÷ 2 = _____
0 ÷ 7 = _____	16 ÷ 8 = _____	0 ÷ 1 = _____	15 ÷ 3 = _____
30 ÷ 3 = _____	0 ÷ 5 = _____	6 ÷ 2 = _____	36 ÷ 9 = _____
48 ÷ 8 = _____	50 ÷ 10 = _____	6 ÷ 1 = _____	70 ÷ 10 = _____
72 ÷ 9 = _____	56 ÷ 7 = _____	12 ÷ 4 = _____	2 ÷ 1 = _____
100 ÷ 10 = _____	42 ÷ 7 = _____	18 ÷ 9 = _____	30 ÷ 10 = _____
42 ÷ 6 = _____	30 ÷ 6 = _____	40 ÷ 10 = _____	90 ÷ 9 = _____
6 ÷ 3 = _____	16 ÷ 4 = _____	32 ÷ 4 = _____	8 ÷ 8 = _____

Name _____

Timed Test 6
Division Facts

Time: _____ **Number Correct:** _____

18 ÷ 2 = _____	6 ÷ 2 = _____	36 ÷ 6 = _____	9 ÷ 3 = _____
40 ÷ 5 = _____	16 ÷ 4 = _____	32 ÷ 8 = _____	8 ÷ 4 = _____
6 ÷ 6 = _____	12 ÷ 2 = _____	10 ÷ 2 = _____	8 ÷ 8 = _____
14 ÷ 7 = _____	54 ÷ 6 = _____	32 ÷ 4 = _____	0 ÷ 6 = _____
15 ÷ 3 = _____	27 ÷ 3 = _____	9 ÷ 1 = _____	35 ÷ 7 = _____
64 ÷ 8 = _____	40 ÷ 4 = _____	30 ÷ 3 = _____	80 ÷ 10 = _____
60 ÷ 6 = _____	100 ÷ 10 = _____	56 ÷ 7 = _____	24 ÷ 3 = _____
30 ÷ 10 = _____	0 ÷ 5 = _____	16 ÷ 8 = _____	20 ÷ 2 = _____
0 ÷ 8 = _____	24 ÷ 8 = _____	7 ÷ 7 = _____	20 ÷ 4 = _____
4 ÷ 1 = _____	36 ÷ 9 = _____	40 ÷ 10 = _____	12 ÷ 6 = _____
6 ÷ 3 = _____	42 ÷ 7 = _____	72 ÷ 9 = _____	27 ÷ 9 = _____
15 ÷ 5 = _____	56 ÷ 8 = _____	45 ÷ 5 = _____	45 ÷ 9 = _____
21 ÷ 3 = _____	28 ÷ 4 = _____	90 ÷ 9 = _____	18 ÷ 3 = _____
16 ÷ 2 = _____	2 ÷ 2 = _____	12 ÷ 4 = _____	63 ÷ 7 = _____
10 ÷ 1 = _____	10 ÷ 5 = _____	20 ÷ 5 = _____	80 ÷ 8 = _____
28 ÷ 7 = _____	18 ÷ 9 = _____	21 ÷ 7 = _____	20 ÷ 10 = _____
25 ÷ 5 = _____	40 ÷ 8 = _____	9 ÷ 9 = _____	0 ÷ 4 = _____
54 ÷ 9 = _____	35 ÷ 5 = _____	30 ÷ 5 = _____	18 ÷ 6 = _____
42 ÷ 6 = _____	7 ÷ 1 = _____	14 ÷ 2 = _____	8 ÷ 2 = _____
24 ÷ 4 = _____	70 ÷ 7 = _____	48 ÷ 6 = _____	48 ÷ 8 = _____
81 ÷ 9 = _____	30 ÷ 6 = _____	36 ÷ 4 = _____	49 ÷ 7 = _____
70 ÷ 10 = _____	50 ÷ 10 = _____	50 ÷ 5 = _____	6 ÷ 1 = _____
0 ÷ 10 = _____	2 ÷ 1 = _____	72 ÷ 8 = _____	90 ÷ 10 = _____
4 ÷ 4 = _____	0 ÷ 3 = _____	5 ÷ 1 = _____	5 ÷ 5 = _____
0 ÷ 1 = _____	24 ÷ 6 = _____	12 ÷ 3 = _____	63 ÷ 9 = _____

Name _____

Timed Test 7

Mixed Multiplication/Division Facts

Time: _____ **Number Correct:** _____

8 × 8 = _____	6 × 7 = _____	70 ÷ 10 = _____	5 × 5 = _____
5 × 1 = _____	10 ÷ 1 = _____	1 × 2 = _____	50 ÷ 5 = _____
24 ÷ 6 = _____	80 ÷ 10 = _____	0 ÷ 4 = _____	1 × 6 = _____
5 × 2 = _____	16 ÷ 8 = _____	8 ÷ 8 = _____	0 × 4 = _____
20 ÷ 4 = _____	8 × 5 = _____	8 × 3 = _____	2 × 10 = _____
16 ÷ 2 = _____	10 × 3 = _____	9 × 6 = _____	5 × 7 = _____
9 × 1 = _____	2 ÷ 2 = _____	7 × 5 = _____	30 ÷ 6 = _____
70 ÷ 7 = _____	4 × 4 = _____	6 × 9 = _____	81 ÷ 9 = _____
6 ÷ 3 = _____	54 ÷ 6 = _____	3 ÷ 1 = _____	36 ÷ 4 = _____
3 × 7 = _____	100 ÷ 10 = _____	21 ÷ 3 = _____	10 × 8 = _____
5 × 9 = _____	7 × 2 = _____	5 × 0 = _____	6 ÷ 1 = _____
6 × 4 = _____	0 × 7 = _____	20 ÷ 2 = _____	24 ÷ 8 = _____
49 ÷ 7 = _____	0 ÷ 1 = _____	2 × 1 = _____	21 ÷ 7 = _____
30 ÷ 3 = _____	15 ÷ 5 = _____	8 ÷ 4 = _____	7 × 7 = _____
10 × 9 = _____	10 × 6 = _____	3 × 9 = _____	9 × 2 = _____
6 ÷ 6 = _____	12 ÷ 2 = _____	64 ÷ 8 = _____	30 ÷ 10 = _____
4 × 6 = _____	3 × 1 = _____	54 ÷ 9 = _____	8 × 1 = _____
8 ÷ 2 = _____	2 × 8 = _____	9 × 4 = _____	10 × 4 = _____
28 ÷ 4 = _____	7 × 10 = _____	2 × 6 = _____	7 ÷ 1 = _____
0 × 1 = _____	0 ÷ 10 = _____	4 × 3 = _____	32 ÷ 4 = _____
2 × 3 = _____	32 ÷ 8 = _____	12 ÷ 3 = _____	5 × 8 = _____
7 × 0 = _____	10 × 10 = _____	27 ÷ 3 = _____	0 × 9 = _____
45 ÷ 9 = _____	36 ÷ 6 = _____	9 × 7 = _____	4 × 1 = _____
40 ÷ 5 = _____	10 × 0 = _____	5 ÷ 5 = _____	24 ÷ 4 = _____
1 × 9 = _____	4 × 10 = _____	10 ÷ 2 = _____	20 ÷ 5 = _____

Name _____

Timed Test 8

Mixed Multiplication/Division Facts

Time: _____ **Number Correct:** _____

0 ÷ 6 = _____	3 × 0 = _____	3 × 10 = _____	5 × 4 = _____
4 × 7 = _____	0 × 0 = _____	25 ÷ 5 = _____	90 ÷ 10 = _____
5 × 6 = _____	2 × 9 = _____	18 ÷ 3 = _____	2 ÷ 1 = _____
9 ÷ 3 = _____	5 ÷ 1 = _____	24 ÷ 3 = _____	4 × 8 = _____
7 × 8 = _____	8 × 6 = _____	9 × 8 = _____	1 × 3 = _____
3 ÷ 3 = _____	30 ÷ 5 = _____	14 ÷ 7 = _____	0 ÷ 7 = _____
8 × 10 = _____	8 ÷ 1 = _____	3 × 5 = _____	6 × 3 = _____
40 ÷ 8 = _____	18 ÷ 6 = _____	2 × 2 = _____	63 ÷ 7 = _____
35 ÷ 5 = _____	2 × 4 = _____	63 ÷ 9 = _____	56 ÷ 7 = _____
9 × 9 = _____	0 × 6 = _____	80 ÷ 8 = _____	8 × 2 = _____
9 ÷ 1 = _____	0 ÷ 2 = _____	0 ÷ 9 = _____	5 × 10 = _____
6 × 1 = _____	1 × 1 = _____	3 × 2 = _____	72 ÷ 8 = _____
5 × 3 = _____	7 ÷ 7 = _____	6 × 8 = _____	10 × 2 = _____
10 ÷ 5 = _____	16 ÷ 4 = _____	15 ÷ 3 = _____	0 × 8 = _____
9 ÷ 9 = _____	18 ÷ 2 = _____	20 ÷ 10 = _____	6 × 10 = _____
50 ÷ 10 = _____	6 × 6 = _____	8 × 4 = _____	35 ÷ 7 = _____
42 ÷ 6 = _____	40 ÷ 4 = _____	10 × 7 = _____	40 ÷ 10 = _____
6 × 5 = _____	8 × 9 = _____	1 × 8 = _____	7 × 6 = _____
7 × 4 = _____	0 × 2 = _____	42 ÷ 7 = _____	14 ÷ 2 = _____
9 × 3 = _____	1 × 4 = _____	8 × 7 = _____	4 × 5 = _____
3 × 4 = _____	4 ÷ 1 = _____	72 ÷ 9 = _____	12 ÷ 6 = _____
6 ÷ 2 = _____	60 ÷ 10 = _____	45 ÷ 5 = _____	18 ÷ 9 = _____
28 ÷ 7 = _____	8 × 0 = _____	10 × 5 = _____	7 × 3 = _____
36 ÷ 9 = _____	9 × 5 = _____	12 ÷ 4 = _____	90 ÷ 9 = _____
6 × 2 = _____	4 ÷ 4 = _____	4 ÷ 2 = _____	48 ÷ 6 = _____

Math Timed Tests—Class Record Sheet

Student Names	Test 1 +/– Facts	Test 2 +/– Facts	Test 3 × Facts	Test 4 × Facts	Test 5 ÷ Facts	Test 6 ÷ Facts	Test 7 ×/÷ Facts	Test 8 ×/÷ Facts

Name _____

Math Test Page _____

1.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**5.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**6.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**7.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**8.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ

9.

10.

Name _____

Math Test Page _____

1.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**5.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**6.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**7.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**8.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ

9.

10.

Name _____

Math Test Page _____

1.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**5.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**6.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**7.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	**8.**	Ⓐ	Ⓑ	Ⓒ	Ⓓ

9.

10.

Awards

You're a STAR

You're doing GREAT!

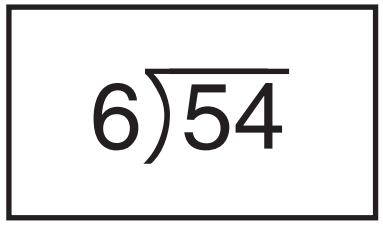
Keep up the good work!

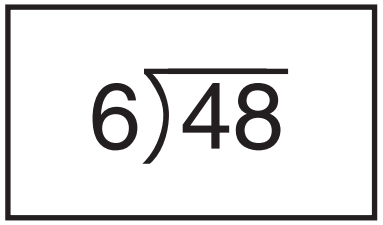
MATH Genius

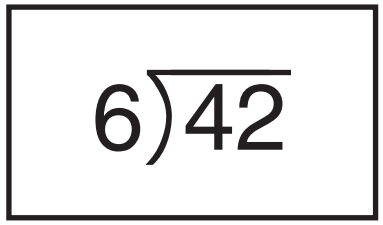
#1 in MATH

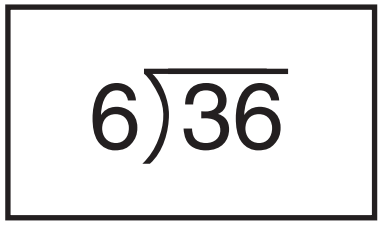
10 × 10	10 × 9	10 × 8	10 × 7
10 × 6	9 × 9	9 × 8	9 × 7
9 × 6	9 × 5	8 × 8	8 × 7
8 × 6	7 × 7	7 × 6	6 × 6

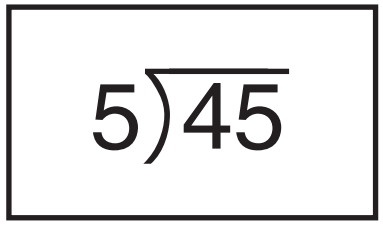
12 × 12	12 × 11	12 × 10	12 × 9
12 × 8	12 × 7	12 × 6	12 × 5
12 × 4	12 × 3	12 × 2	11 × 11
11 × 10	11 × 9	11 × 8	11 × 7

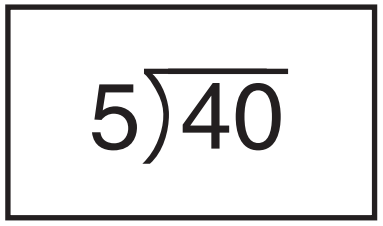


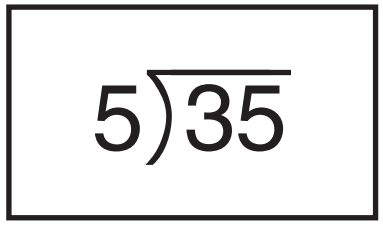


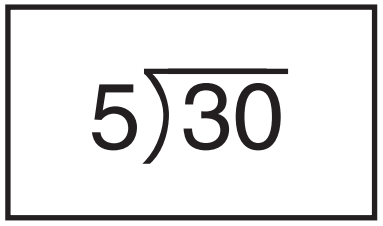


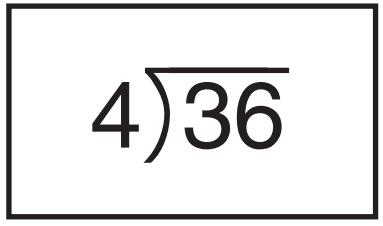


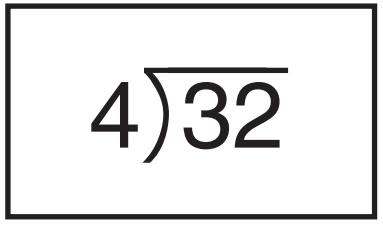


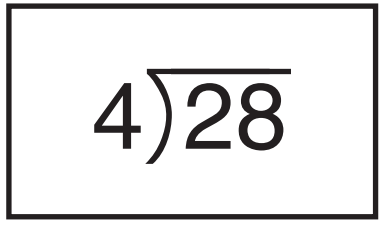


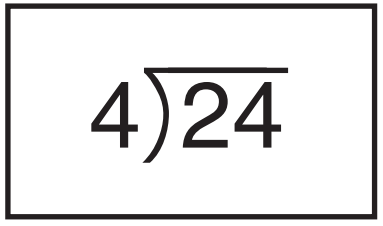


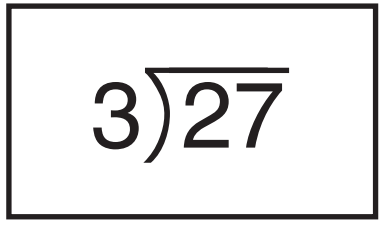


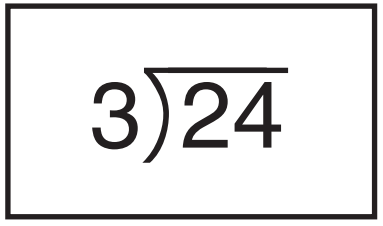


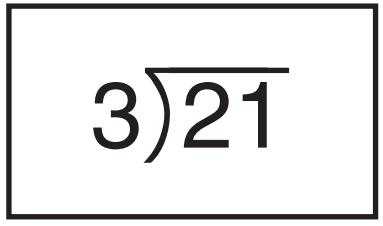


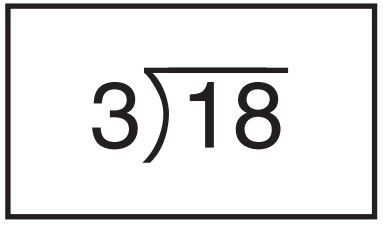


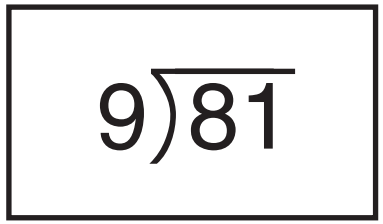


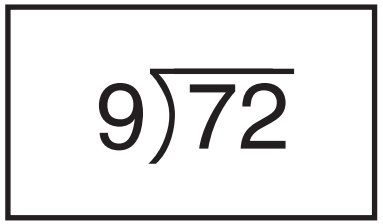


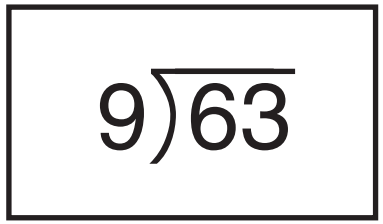


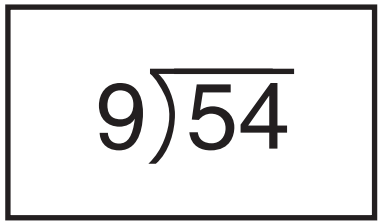


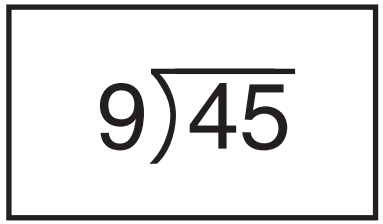


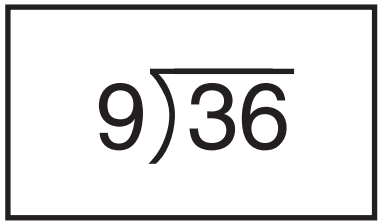


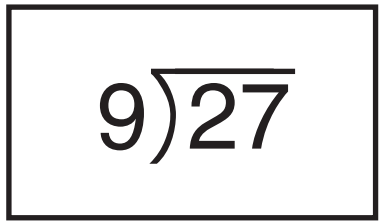


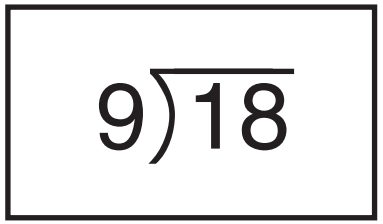


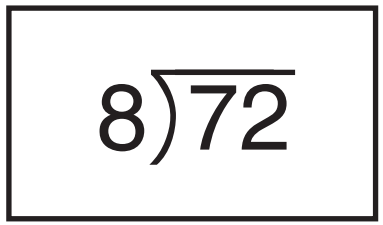


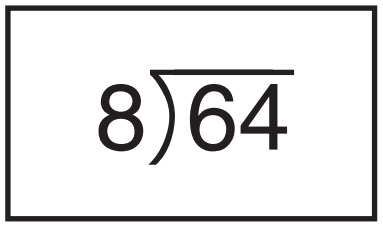


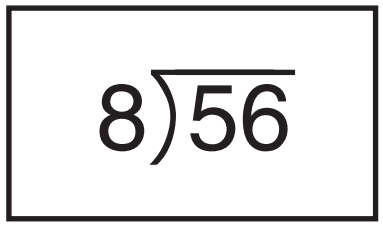


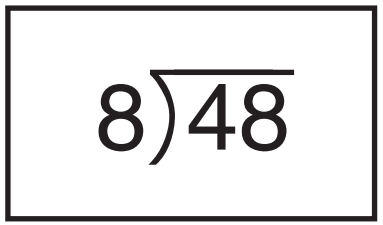


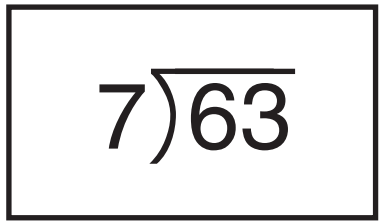


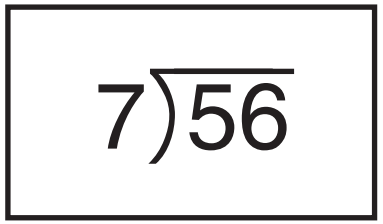


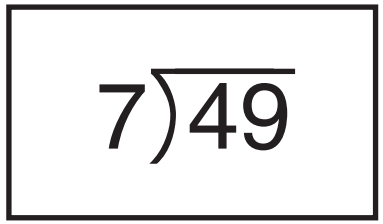


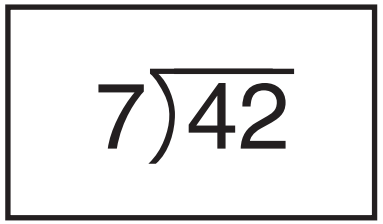












Answer Key

Page 5
In water beds

Page 6
A mushroom

Page 7
1. five thousand
2. forty-five thousand
3. three thousand seven hundred
4. five thousand eight hundred thirty-five
5. thirteen thousand nine hundred
6. four hundred ninety-seven
7. one hundred fifty-two thousand one hundred
8. four thousand eight
9. 468
10. 8,003
11. 6,025
12. 902
13. 461
14. 526,000
15. 40,006
16. 83,267

Page 8
1. 5,063
2. 7,700
3. 7,089
4. 10,906
5. 384,328
6. 890
7. 40,600
8. 87,549
9. 803
10. 90,099
11. 4,000 + 500
12. 30,000 + 5,000
13. 600 + 90 + 2
14. 1,000 + 90
15. 5,000 + 30 + 8
16. 6,000 + 30
17. 10,000 + 4,000 + 900 + 70 + 2
18. 200,000 + 80,000

Page 9
1. two hundred forty-five dollars
2. nine hundred dollars
3. twelve thousand five hundred dollars
4. eighty-seven dollars

Page 10
1. C
2. B
3. A
4. D
5. B
6. C
7. A
8. D
9. 23,097
10. five thousand nine hundred seventy-three

Page 11
A hot dog

Page 12
End of path is 10

Page 13
1. 256, 299, 309, 310, 764, 842
2. 575, 599, 672, 673, 674, 769
3. 7.85, 74.5, 77.5, 79.4, 80.29, 80.3
4. 497, 490, 485, 482, 479, 443
5. 2,001; 2,000; 1,990; 1,010; 1,008; 998
6. 10.8, 10.6, 9.9, 9.2, 8.9, 1.9
7. 4.62, 4.61, 4.53, 4.51, 4.44, 4.32
8. 48.5, 48.49, 48.43, 47.0, 46.99, 43.5, 42

Page 14
1. 489, 490, 492, 500, 509, 526
2. 524, 596, 597, 602, 623, 635
3. $8\frac{1}{2}$, $8\frac{2}{3}$, 9, $9\frac{5}{8}$, 10, $10\frac{1}{2}$
4. 809, 804, 802, 800, 791, 790
5. 2,900; 2,009; 2,006; 1,990; 1,987; 1,098
6. $10\frac{1}{2}$, $10\frac{1}{4}$, 10, $9\frac{1}{2}$, $8\frac{3}{4}$, $8\frac{1}{2}$
7. $5\frac{1}{2}$, $5\frac{1}{4}$, $4\frac{3}{4}$, $4\frac{1}{2}$, $3\frac{3}{4}$, $3\frac{1}{4}$
8. $7\frac{3}{4}$, $7\frac{1}{2}$, $6\frac{3}{4}$, $6\frac{1}{2}$, $5\frac{3}{4}$, $5\frac{1}{2}$, $5\frac{1}{4}$

Page 15
1. 6 ft. 1 in., 5 ft. 9 in., 5 ft. 6 in., 5 ft. 2 in., 4 ft. 8 in.
2. Answers will vary, but should have 14 in the middle with 5 and 7 on either end.
3. 21 inches, 18 inches, 15 inches, 11 inches, 8 inches
4. 5 yards, 12 feet, 10 feet, 3 yards, 6 feet, 4 feet
5. 108, 105, 96, 89, 62, 32, 29, 27

Page 16
1. C
2. B
3. C
4. A
5. B
6. A
7. D
8. C
9. Raul, Fred, Sharon, Brandon, Maria
10. No, 138 and 147 should be switched.

Page 17
Because you can hear a pin drop

Page 18
Greek grapes

Page 19

1. ten thousands
2. hundred thousands
3. ones
4. hundreds
5. millions
6. hundred thousands
7. tens
8. thousands
9. millions
10. ten thousands
11. 1
12. 6
13. 9
14. 5
15. 0

Page 20

1. 6,500
2. 7,240
3. 29,000
4. 590,000
5. 300,000
6. 190,750
7. 83,800
8. 731,000
9. 70,000
10. 288,000
11. 380,720
12. 381,000
13. 380,000
14. 400,000
15. 380,700

Page 21

1. $20 + $20 + $20 + $10 + $30 = $100
2. Jane is correct because when there is a 3 in the ones place, you should round down to 25,800.
3. Roberto is always rounding down. He should look at the digit to the right of the hundreds place (the tens place value). If that number is 5 or more, he should round up.
4. correct

Page 22

1. A
2. C
3. C
4. D
5. B
6. D
7. D
8. A
9. correct
10. Shirley, your answer is not correct. When you look at the thousands place value, there is a 4, which means you do not need to round up. So the correct answer should be 1,870,000.

Page 23

They are two tired

Page 24

Aluminum linoleum

Page 25

1. 1,478
2. 1,171
3. 486
4. 1,714
5. 2,044
6. 2,597
7. 2,256
8. 2,031
9. 2,145
10. 2,621

Page 26

1. 1,840
2. 3,095
3. 1,490
4. 1,842
5. 3,043
6. 1,932
7. 1,796
8. 1,095
9. 1,942
10. 3,118

Page 27

1. $51
2. $406
3. $252
4. $752
5. $154

Page 28

1. D
2. A
3. B
4. B
5. A
6. D
7. C
8. D
9. Answers will vary, but must use the given numbers.
10. $746

Page 29

1. 25 (512 – 487)
2. 751 (875 – 124)
3. You will get the largest difference if you subtract the largest number possible from the smallest number.
4. 26 (623 – 597)
5. You will get the smallest difference with 2 numbers that are closest in value.
6. 741 (976 – 235)

Page 30

To tie up the game

Page 31

1. 29
2. 242
3. 233
4. 122
5. 483
6. 490
7. 190
8. 468
9. 247
10. 99
11. 703
12. 520
13. 200
14. 99
15. 263
16. 138
17. 25
18. 500
19. 99
20. 41

Page 32

1. 400
2. 90
3. 282
4. 57
5. 146
6. 104
7. 7
8. 1
9. 100
10. 99
11. 195
12. 273
13. 235
14. 170
15. 497
16. 401
17. 101
18. 701
19. 310
20. 585

Page 33

1. $444
2. Yes, with 23 additional seats.
3. $573
4. No, he is $23 short.
5 Yes, they have 267 miles to go.

Page 34

1. B
2. A
3. B
4. C
5. D
6. C
7. A
8. B
9. Yes, because he has 149 tickets left.
10. $47; 145 – 98 = 47

Page 35

They only eat weak knights

Page 36

Tiny orangutan tongues

Page 37

×	6	1	4	9	2	7	3	10	5	8
7	42	7	28	63	14	49	21	70	35	56
2	12	2	8	18	4	14	6	20	10	16
9	54	9	36	81	18	63	27	90	45	72
4	24	4	16	36	8	28	12	40	20	32
5	30	5	20	45	10	35	15	50	25	40
1	6	1	4	9	2	7	3	10	5	8
3	18	3	12	27	6	21	9	30	15	24
8	48	8	32	72	16	56	24	80	40	64
10	60	10	40	90	20	70	30	100	50	80
6	36	6	24	54	12	42	18	60	30	48

Page 38

1.	30	16	7
2.	14	72	56
3.	32	42	18
4.	54	9	28
5.	6	70	45
6.	50	64	5
7.	18	36	40
8.	81	16	90
9.	4	24	21
10.	49	4	48
11.	40	60	100
12.	2	35	27
13.	8	63	
14	36	16	

Page 39

1. 27 baseball cards
2. 40 frogs
3. No, he only has 18 cupcakes, so he is 3 short.
4. 20 quarters
5 Yes, she will have 56 marbles.
6. 21 steps

Page 40

1.	B	3.	C	5.	C	7.	D
2.	A	4.	D	6.	B	8.	C

9. Yes, because he has 54 muffins.
10. 30 pieces of gum

Page 41

He needed a web site

Page 42

Six thick thistle sticks

Page 43

×	2	12	10	6	8	5	7	1	11	4	9	3
1	2	12	10	6	8	5	7	1	11	4	9	3
6	12	72	60	36	48	30	42	6	66	24	54	18
12	24	144	120	72	96	60	84	12	132	48	108	36
4	8	48	40	24	32	20	28	4	44	16	36	12
7	14	84	70	42	56	35	49	7	77	28	63	21
10	20	120	100	60	80	50	70	10	110	40	90	30
3	6	36	30	18	24	15	21	3	33	12	27	9
8	16	96	80	48	64	40	56	8	88	32	72	24
11	22	132	110	66	88	55	77	11	121	44	99	33
9	18	108	90	54	72	45	63	9	99	36	81	27
5	10	60	50	30	40	25	35	5	55	20	45	15
2	4	24	20	12	16	10	14	2	22	8	18	6

Page 44

1.	60	16	77
2.	14	72	56
3.	32	42	22
4.	54	9	28
5.	11	70	45
6.	50	64	5
7.	108	108	40
8.	81	16	90
9.	44	24	21
10.	49	24	48
11.	0	60	100
12.	12	35	144
13.	88	63	
14.	36	16	

Page 45

1. 72 eggs
2. 60 stamps
3. 24 slices
4. No, she only has 66 plants.
5. 48

Page 46

1.	B	3.	D	5.	C	7.	D
2.	A	4.	B	6.	D	8.	B

9. Yes, he has 30 pieces of gum for 25 students.
10. 48 cookies

Page 47

When it is ajar

Page 48

1.	3,072	3.	4,025	5.	46,310
2.	35,364	4.	21,170		

Page 49

1.	1,875	8.	60,080	15.	11,800
2.	4,368	9.	58,469	16.	8,466
3.	2,356	10.	10,276	17.	9,853
4.	9,344	11.	7,560	18.	11,152
5.	15,418	12.	275	19.	3,996
6.	27,156	13.	1,344	20.	7,560
7.	23,016	14.	2,144		

Page 50

1.	3,213	8.	5,412	15.	28,548
2.	3,526	9.	15,730	16.	53,088
3.	516	10.	21,150	17.	8,148
4.	16,080	11.	1,316	18.	22,428
5.	6,876	12.	4,422	19.	22,632
6.	32,670	13.	2,968	20.	1,890
7.	15,402	14.	18,240		

Page 51

1. $12,300
2. 6,500 sheets of paper
3. 6,321 pages
4. 6,419 pages
5. 12,180 sheets of newspaper

Page 52

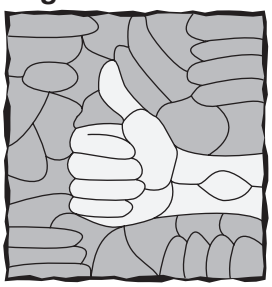
1. B	3. A	5. C	7. A
2. C	4. D	6. A	8. D

9. 360 buttons
10. No, they'll only have $17,370, $1,630 short.

Page 53

a monkey

Page 54



Page 55

1. 18 ÷ 3 = 6 and 18 ÷ 6 = 3
2. 24 ÷ 4 = 6 and 24 ÷ 6 = 4
3. 15 ÷ 3 = 5 and 15 ÷ 5 = 3
4. Pictures will vary, but should be in a 2 by 4 array.
5. Pictures will vary, but should be in a 3 by 4 array.

Page 56

1. 16 ÷ 4 = 4 and 16 ÷ 4 = 4 (only one answer)
2. 27 ÷ 3 = 9 and 27 ÷ 9 = 3
3. 9 ÷ 3 = 3 and 9 ÷ 3 = 3 (only one answer)
4. Pictures will vary, but should show a 6 by 3 array.
5. Pictures will vary, but should show a 3 by 3 array.

Page 57

1. 3 candy bars; pictures will vary.
2. $5 each; pictures will vary.
3. 5 pieces of candy; pictures will vary.
4. 7 pages; 12 more stickers for 10 pages; pictures will vary.

Page 58

1. A	3. D	5. C	7. A
2. C	4. A	6. D	8. C

9. Pictures will vary, but should show 21 objects divided into groups of 7.
10. Pictures will vary, but should show that each person will get 3 pieces of gum.

Page 59

Traffic jam

Page 60

A lighthouse

Page 61

1. 3	2	1
2. 6	9	3
3. 3	9	3
4. 7	1	5
5. 7	0	7
6. 7	8	3
7. 3	5	6
8. 3	6	2
9. 2	6	5
10. 9	2	9
11. 4	3	4
12. 8	4	9
13. 6	2	
14. 7	0	

Page 62

1. 7	3	3
2. 3	9	3
3. 6	4	6
4. 3	0	4
5. 7	8	4
6. 9	1	4
7. 5	3	7
8. 4	3	1
9. 1	8	0
10. 2	5	3
11. 9	2	8
12. 1	2	8
13. 6	2	
14. 0	6	

Page 63

1. 8 cookies each
2. groups of 2, 3, 4, 6, 8 and 12
3. 6 balloons
4. 9 signatures per page
5. 2 cupcakes each; 1 + 5 + 3 + 3 = 12, 24 ÷ 12 = 2

Page 64

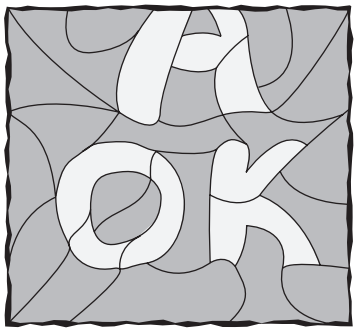
1. C	3. B	5. D	7. B
2. A	4. D	6. C	8. D

9. Answers will vary.
10. 9 tickets

Page 65

Baboon bamboo

Page 66



Page 67

1. 9 R3
2. 9 R4
3. 7 R2
4. 4 R1
5. 12
6. 7 R6
7. 7
8. 8 R1
9. 8 R4
10. 2R1
11. Answers will vary.
12. Answers will vary.

Page 68

1. 6 R8
2. 5 R2
3. 5 R1
4. 4 R3
5. 21
6. 6 R1
7. 3 R4
8. 9 R5
9. 7 R3
10. 1 R7
11. Answers will vary.
12. Answers will vary.

Page 69

1. Answers will vary. For example, break the cookies each in half.
2. Answers will vary. Exchange the dime for 2 nickels.
3. Answers will vary. Give the extra balloon back to the teacher.
4. Answers will vary. Each person gets 4 minutes.
5. 10 banners with 6 inches left over
6. 7 plates with 1 left to snack on
7. Each person gets 7 markers and there will be 6 leftover.

Page 70

1. A
2. B
3. D
4. B
5. A
6. D
7. A
8. C
9. Answers will vary.
10. 19 with 2 extras; maybe they could each keep one

Page 71

Odd numbers: 215, 413, 721, 429, 89, 555, 315
Even numbers: 724, 616

Page 72

Prime numbers: 11, 31, and 7
Composite numbers: 49, 8, 12, 25, and 16

Page 73

1. odd
2. even
3. odd
4. odd
5. odd
6. odd
7. even
8. even
9. odd
10. odd
11. even
12. odd
13. even
14. even
15. even
16. odd
17. odd
18. odd
19. odd
20. even
21. even
22. even
23. odd
24. even

Page 74

X	O	O	X	O	X	O	X	X	X
O	X	O	X	X	X	O	X	O	X
X	X	O	X	X	X	X	X	O	X
O	X	X	X	X	X	O	X	X	X
O	X	O	X	X	X	O	X	X	X
X	X	O	X	X	X	X	X	O	X
O	X	X	X	X	X	O	X	X	X
O	X	O	X	X	X	X	X	O	X
X	X	O	X	X	X	X	X	O	X
X	X	X	X	X	X	O	X	X	X

Page 75

1. Lengths are 5 and 7. Answers will vary for the second part. One solution is to cut 2 lengths of 7. Cut each of those off using the 5, leaving a length of 2 for each. Lay the two 2s end to end and compare with the 5 stick. The difference is 1.
2. Lengths are 7, 11, and 13. Answers will vary for the second part. One solution is to cut 2 lengths of 11. Cut each of those off using the 7, leaving a length of 4 for each. Lay the two 4s end to end and this gives you the 8.
3. Yes, the sum of two odd numbers is always even.
4. Yes, the sum of two even numbers is always even.
5. Yes, the sum of one even and one odd number is always odd.

Page 76

1. C
2. C
3. D
4. A
5. D
6. D
7. A
8. C
9. Answers will vary, but must be five even numbers greater than 45.
10. 11, 13, 17, 19, 23, and 29

Page 77

He was playing
catch her (catcher)

Page 78

Beep repaired
(Be prepared)

Page 79

1. Circled in red: 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 90 95 100
2. Crossed out in blue: 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99
3. 2 4 6 8 10 12 14 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

Page 80

1. 1, 2, 4, 8
2. 1, 2, 3, 4, 6, 12
3. 1, 3, 5, 15
4. 1, 3, 7, 21
5. 1, 2, 3, 4, 6, 8, 12, 24
6. 1, 3, 9
7. 1, 2, 4, 8, 16, 32
8. 1, 7
9. 1, 2, 3, 6
10. 1, 2, 4, 8, 16
11. 1, 5, 7, 35
12. 1, 2, 4, 5, 8, 10, 20, 40
13. 1, 5, 25
14. 1, 3, 5, 9, 15, 45
15. 1, 2, 3, 6, 7, 14, 21, 42
16. 1, 31
17. 1, 2, 11, 22
18. 1, 2, 3, 6, 9, 18
19. 1, 5
20. 1, 2, 5, 10

Page 81

1. 1, 2, 3, 4, 6, 8, 12, or 24 stacks
2. Answers will vary, but should be multiples of 3 (6, 9, 12, 15, 18, etc.).
3. 1 row of 12, 2 rows of 6, 3 rows of 4, 4 rows of 3, 6 rows of 2, or 12 rows of 1. Answers will vary on the second part.
4. 36, 45, 54, or 63 erasers
5. 48, 54, 60, or 66 magazines

Page 82

1. C	3. C	5. B	7. A
2. A	4. A	6. D	8. C

9. 2, 3, 5, 7, 11, 13, 17, 19
10. 8, 16, 24, 32, 40

Page 83

Toy boat

Page 84

Doris locked,
that's why I knocked.

Page 85

1. $\frac{2}{3}$
2. $1\frac{3}{4}$
3. $\frac{1}{4}$
4. $1\frac{2}{3}$
5. $1\frac{1}{4}$
6. $2\frac{1}{4}$
7. $1\frac{1}{3}$
8. $1\frac{1}{4}$

Page 86

1. <	5. <	9. <	13. <
2. <	6. <	10. <	14. =
3. <	7. =	11. >	
4. <	8. >	12. >	

Page 87

1. 2 eggs
2. Jose, because he missed 6 and Molly missed 5.
3. They both got 75 correct and missed 25.
4. Answers will vary. Alec and Sandy, you both have the same amount of money. You each have $0.50.
5. Answers will vary. Yes, if Adam's test had more items, for example if it had 20 items and he missed half, then he missed 10 items and Katie only missed 7.

Page 88

1. A	3. B	5. D	7. A
2. D	4. C	6. B	8. C

9. Answers will vary, but should show models of $\frac{1}{3}$ and $\frac{1}{4}$.
10. Mureta got 18 correct and Juan got only 15 correct.

Page 89

When eating
watermelon

Page 90

Friday's five fresh
fish specials

Page 91

1. $\frac{6}{7}$
2. $\frac{6}{7}$
3. $\frac{5}{6}$
4. $\frac{3}{3}$ or 1
5. $\frac{7}{9}$
6. $\frac{11}{12}$
7. $\frac{6}{7}$
8. $\frac{7}{8}$
9. $\frac{3}{5}$
10. $\frac{3}{4}$
11. $3\frac{3}{5}$
12. $4\frac{3}{4}$
13. $3\frac{7}{9}$
14. $6\frac{3}{7}$
15. $12\frac{1}{9}$

Page 92

1. $\frac{4}{9}$
2. $\frac{5}{7}$
3. $\frac{1}{4}$
4. $\frac{7}{9}$
5. $\frac{2}{5}$
6. $\frac{3}{7}$
7. $\frac{1}{8}$
8. $\frac{1}{6}$
9. $\frac{7}{10}$
10. $\frac{2}{9}$
11. $5\frac{2}{4}$ or $5\frac{1}{2}$
12. $4\frac{2}{9}$
13. $4\frac{5}{7}$
14. $3\frac{3}{5}$
15. $3\frac{1}{8}$

Page 93

1. $3\frac{1}{4}$ packages of gum
2. $6\frac{2}{3}$ boxes of candy
3. $2\frac{2}{4}$ or $2\frac{1}{2}$ bags of candy
4. $4\frac{2}{5}$ miles
5. Yes, because it is $5\frac{1}{4}$ pages long.

Page 94

1. B	3. A	5. A	7. C
2. D	4. C	6. D	8. D

9. $2\frac{3}{4}$ pages
10. $4\frac{4}{4}$ or 5 packages

Page 95

He is a great butter-
in-law

Page 96

At flea markets

Page 97

1. Answers will vary: $\frac{2}{4}$, $\frac{3}{6}$
2. Answers will vary: $\frac{2}{6}$, $\frac{3}{9}$
3. Answers will vary: $\frac{2}{10}$, $\frac{3}{15}$
4. Answers will vary: $\frac{4}{6}$, $\frac{6}{9}$

Page 97 (continued)

5. Answers will vary: $\frac{8}{10}$, $\frac{12}{15}$
6. Answers will vary: $\frac{6}{14}$, $\frac{9}{21}$
7. Answers will vary: $\frac{2}{8}$, $\frac{3}{12}$
8. Answers will vary: $\frac{2}{14}$, $\frac{3}{21}$
9. Answers will vary: $\frac{6}{8}$, $\frac{8}{12}$
10. Answers will vary: $\frac{4}{10}$, $\frac{6}{15}$

11. $\frac{1}{2}$	14. $\frac{1}{4}$	17. $\frac{2}{3}$	20. $\frac{1}{3}$
12. $\frac{1}{3}$	15. $\frac{3}{4}$	18. $\frac{3}{7}$	
13. $\frac{1}{3}$	16. $\frac{2}{3}$	19. $\frac{3}{4}$	

Page 98

1. D	3. H	5. E	7. F
2. G	4. A	6. C	8. B

Page 99

1. 0.3 is a larger discount
2. $\frac{1}{4}$ cup
3. Answers will vary.
4. Answers will vary.

Page 100

1. D	3. D	5. D	7. B
2. B	4. B	6. C	8. D

9. Answers will vary: $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$
10. Answers will vary.

Page 101

A watch dog

Page 102

Seven silly Santas slid on the slick snow

Page 103

1. 3.8	11. 14.79
2. 11.7	12. 14.92
3. 8.9	13. 11.79
4. 8.9	14. 16.31
5. 8.6	15. 16.66
6. 12.2	16. 13.39
7. 15.1	17. 8.84
8. 13.2	18. 12.75
9. 4.27	19. 14.97
10. 11.1	20. 57.84

Page 104

1. 1.1	11. 3.88
2. 3.2	12. 3.51
3. 3.3	13. 3.09
4. 2.3	14. 1.67
5. 1.05	15. 2.32
6. 3.79	16. 43.1
7. 4.07	17. 20.27
8. 4.94	18. 44.64
9. 2.3	19. 0.54
10. 1.41	20. 0.99

Page 105

1. $2.36	4. 6 ft
2. 0.25 m	5. 5.3 ft
3. 18.3 cm	

Page 106

1. A	3. B	5. C	7. A
2. D	4. A	6. D	8. A

9. 7.4 feet
10. 2.7 yards

Page 107

A blazer

Page 108

1. T	3. T	5. T
2. F	4. T	

Page 109

1. <	4. <	7. =	10. <
2. >	5. =	8. =	
3. >	6. =	9. <	

Page 110

1. <	6. >	11. >	16. <
2. >	7. >	12. <	17. <
3. =	8. <	13. <	18. >
4. <	9. <	14. =	19. >
5. =	10. =	15. >	20. <

Page 111

1. Tim
2. 24 centimeters
3. Answers will vary: No, they are equal.
4. both
5. Answers will vary: No, one-tenth is less than two-tenths.

Page 112

1. B	3 A	5. C	7. D
2. A	4. A	6. B	8. B

9. 5.9 feet
10. Answers will vary: No, they are equal.

Page 114
In the river bank

Page 115
Pug puppy

Page 116
1. 11, 13, 15; +2
2. 19, 23, 27; +4
3. 29, 35, 41; +6
4. 16, 32, 64; ×2
5. 16, 13, 10; –3
6. 35, 29, 23; –6
7. 22, 29, 37; +1, +2, +3, +4, etc.
8. 74, 69, 64; –5
9. 84, 92, 100; +8
10. 17, 19, 22; +2, +3, +2, +3, etc.

Page 117
Answers will vary.

1. ⇦ 3. ◪ 5. ◺ 7. □
2. ⬉ 4. ⊘ 6. ▲ 8. ●

Page 118
1. Answers will vary.
2. lengthwise
3. blue, red
4. chorus
5. Answers will vary.

Page 119

1. B	3. B	5. B	7. C
2. D	4. B	6. A	8. B

9. Two ends of bricks followed by one lengthwise brick. The next one should be an end.
10. Answers will vary.

Page 120
Six sharp smart sharks

Page 121
You hold it's nose

Page 122
1. subtraction
2. division
3. 3 + 6 = 9, 6 + 3 = 9, 9 – 3 = 6, and 9 – 6 = 3
4. 1 × 3 = 3, 3 × 1 = 3, 3 ÷ 3 = 1, 3 ÷ 1 = 3
5. 5 × 5 = 25, 25 ÷ 5 = 5
6. 5 + 6 = 11, 6 + 5 = 11, 11 – 5 = 6, 11 – 6 = 5
7. because of the two 5s

Page 123
1. addition
2. multiplication
3. 4 + 3 = 7, 7 – 4 = 3, 7 – 3 = 4
4. 2 × 5 = 10, 10 ÷ 5 = 2, 10 ÷ 2 = 5
5. 2 × 3 = 6, 3 × 2 = 6, 6 ÷ 2 = 3
6. 8 – 6 = 2, 2 + 6 = 8, 6 + 2 = 8
7. 8 + 7 = 15, 15 – 8 = 7, 15 – 7 = 8
8. 12 ÷ 4 = 3, 3 × 4 = 12, 4 × 3 = 12
9. 6 × 3 = 18, 18 ÷ 3 = 6, 18 ÷ 6 = 3
10. 17 – 8 = 9, 8 + 9 = 7, 9 + 8 = 17

Page 124

1. 4	2. 4	3. 2	4. 2

5. Because when there are duplicate numbers and when you use the commutative property, you don't get a new equation (i.e., 5 + 5 = 10; if you switch the two 5s around, you don't get a new unique sentence).

Page 125

1. B	3. D	5. B	7. D
2. A	4. C	6. C	8. D

9. 3 x 4 = 12, 4 x 3 = 12, 12 ÷ 4 = 3, 12 ÷ 3 = 4
10. 4

Page 126
Because all the fans are gone

Page 127
Lemon liniment

Page 128
1. 5, 6, 7, 8, 9, 10
2. 2, 4, 6, 8, 10, 12
3. 1, 3, 5, 8, 9, 12
4. 6, 5, 4, 3, 2, 1
5. 7, 9, 10, 12, 14, 15
6. 17, 25, 16, 10, 19, 20

Page 129
1. 4, 5, 7, 9, 11, 13
2. 18, 6, 15, 27, 45, 63
3. −2, 15, −4, 1, 5, 12
4. 7, 4, 3, 1, 4, 10
5. 17, 28, 25, 30, 17, 24
6. 5, 1, 4, 6, 10, 7

Page 130
1. 9, 12, 15, 18; 15 cupcakes
2. 75, 100, 125, 150
3. 120, 125, 130, 135; 135 centimeters

Page 131

1. D	3. B	5. A	7. B
2. B	4. A	6. C	8. D

9. Answers will vary.
10. Answers will vary.

Page 132

1. +4
2. +1
3. −1
4. ×2
5. ÷2

Page 133

Umbrella

Page 134

1. +4
2. ×2
3. −2
4. +4
5. −5
6. ×3

Page 135

1. +4
2. ×3
3. −3
4. +3
5. ÷4
6. −5

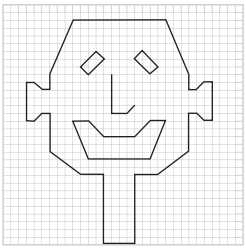
Page 136

1. Answers will vary: ×2, +2, times itself
2. Answers will vary: the correct function is ×3
3. Number of bananas times 31¢, $2.48, $3.10
4. Answers will vary: Herald is correct, function is ÷2; the output for 14 should be 7

Page 137

1. C
2. C
3. B
4. A
5. A
6. C
7. D
8. A
9. Answers will vary: ×3, +8
10. Answers will vary: ÷3, −4

Page 138



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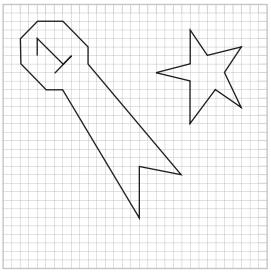

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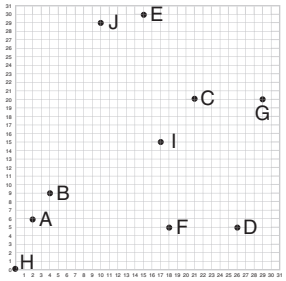

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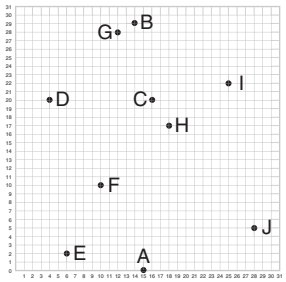

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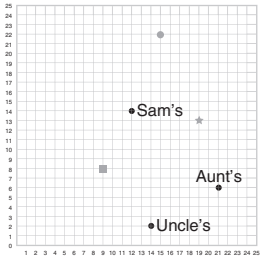


School is (9, 8), Grandparents' house is (19, 13), and grocery store is (15, 22)

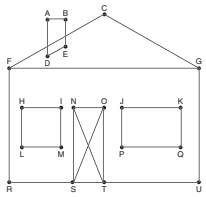
Page 143

1. A
2. C
3. D
4. B
5. C
6. D
7. A
8. B
9. (6, 5)
10. Point O

Page 145

Candy

Page 146



Page 147

Point: an exact location in space

Line: an infinite set of points forming a straight line that extends in two directions

Ray: a part of a line that has one endpoint and extends in one direction

Angle: two rays that share an endpoint

Line Segment: a part of a line defined by two endpoints

Page 148

1. right
2. acute
3. acute
4. acute
5. obtuse
6. right
7. obtuse
8. acute

Page 149

1. No, it isn't a line since a line goes on forever in two directions.
2. 4 line segments
3. No, because of the way that they sway down between the poles.
4. Yes, the endpoint is the sun, and the rays extend out in one direction.
5. 12 times

Page 150

1. A
2. C
3. B
4. D
5. B
6. A
7. D
8. C
9. Both extend forever in at least one direction.
10. A line goes forever in two directions, while a segment has 2 endpoints.

Page 151

1. green (yellow and blue)
2. red
3. pink
4. blue
5. brown
6. red
7. no color
8. brown
9. black
10. no color

Page 152

trapezoid 10; square 0; triangle 2; hexagon 6; rhombus 3

Page 153

1–9. Answers will vary.

10. Possible answers include square, quadrilateral, rectangle, rhombus, parallelogram, or plane figure.

Page 154

1. rectangle, parallelogram
2. triangle
3. parallelogram
4. square, rectangle, parallelogram, rhombus
5. trapezoid
6. circle
7. parallelogram, rhombus
8. hexagon

Page 155

Answers will vary: possible answers include right triangle, isosceles triangle, trapezoid, square, rhombus, rectangle.

Page 156

1. B	3. C	5. B	7. A
2. D	4. A	6. D	8. B

9. Answers will vary.
10. Answers will vary.

Page 157

Thunderwear

Page 158

Even Edith eats eggs

Page 159

1–6. Answers will vary.

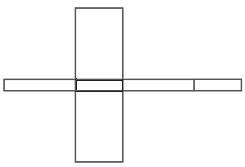
7. Possible answers include cube, square prism, hexahedron.

Page 160

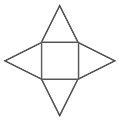
1. pyramid
2. prism, cube
3. cylinder
4. shpere
5 prism
6. cone
7. pyramid

Page 161

1. Triangular prism, with one triangle facing us and one at the back side
2. Many answers possible, for example:



3. Many answers possible, for example:

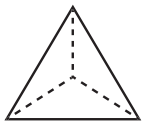


4. Answers will vary; one example: The container is a tall cylinder and inside are three items that are congruent and each is shaped like a sphere.

Page 162

1. C	3. C	5. C	7. D
2. D	4. A	6. A	8. B

9. Answers will vary: basketball, baseball, marble, orange, grapefruit
10. Answers will vary, for example:



Page 163

Three free throw

Page 164

A horse

Page 165

1. translated (slid)
2. rotated (turned)
3. rotated (turned)
4. rotated (turned) OR reflected (flipped)
5. translated (slid)
6. reflected (flipped) OR rotated (turned)
7. rotated (turned)
8. translated (slid)

Page 166

1. translated (slid)
2. reflected (flipped)
3. rotated (turned)
4. translated (slid)
5. rotated (turned) OR reflected (flipped)
6. rotated (turned)
7. reflected (flipped)
8. rotated (turned)

Page 167

2, 4, 6, and 8 are turns

3, 5, 7, and 9 are slides

Page 168

1. B	3. A	5. A	7. B
2. D	4. C	6. D	8. D

9. 

10. 

Page 169

A duckseedo

Page 170

Crisco crisps crusts

Page 171

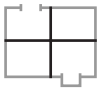
A-1	H-2	O-4	V-1
B-1	I-2	P-0	W-1
C-1	J-0	Q-0	X-2
D-1	K-0	R-0	Y-1
E-1	L-0	S-0	Z-0
F-0	M-1	T-1	
G-0	N-0	U-1	

Page 172

1. 2	3. 1	5. 6	7. 1
2. 4	4. 1	6. 1	8. 5

Page 173

1. Any of the following:



2. Any of the following:

3. Any of the following:

4. There are an infinite number of lines of symmetry on a circle.

Page 174

1. C	3. B	5. A	7. D
2. B	4. D	6. A	8. B

9. Answers will vary.
10. Answers will vary.

Page 176

Black bugs bleed black blood

Page 177

An elephant's shadow

Page 178

1. $2.52	4. $7.07
2. $2.47	5. $10.00
3. $0.11	6. $17.83

7. Answers will vary.
8. Answers will vary.

Page 179

Answers will vary in the last two columns.

1. 75 cents	5. $1.65, 35¢
2. 30¢	6. $5.00, $2.10
3. 80¢	7. $4.82, 18¢
4. $5.15	8. $20.00, $11.01

Page 180

1. 62¢; combinations of coins will vary; fewest coins is 2 quarters, 1 dime, and 2 pennies
2. $1.42; 1 one-dollar bill, 1 quarter, 1 dime, 1 nickel, and 2 pennies
3. $4.25
4. 83¢; Milts and Jinxs or Poxes and Smoths
5. Answers will vary, but they should each total 58¢.

Page 181

1. A	3. D	5. C	7. D
2. B	4. C	6. A	8. A

9. 8 coins; 2 quarters, 2 dimes, and 4 pennies
10. Answers will vary, but should total 27 cents.

Page 182

A meowie

Page 183

A beagle

Page 184

Linear: kilometer, meter, decimeter, centimeter, Millimeter

Capacity: kiloliter, liter, deciliter, centiliter, milliliter

Mass: kilogram, gram, decigram, centigram, milligram

Page 185

Linear: millimeter, centimeter, decimeter, meter, kilometer

Capacity: milliliter, centiliter, deciliter, liter, kiloliter

Mass: milligram, centigram, decigram, gram, kilogram

Page 186

1. meterstick, gram weight, and 2 liters
2. millimeter, centimeter, decimeter, meter, kilometer
3. Answers will vary, but could include something about if the words end in *gram,* then they refer to weight, and if they end in *meter,* then they refer to linear length.

Page 187

1. C	3. C	5. A	7. D
2. A	4. B	6. C	8. A

9. milliliter, centiliter, deciliter, liter, kiloliter
10. meteor

Page 188

end of path is 4

Page 189

You are a star!

Page 190

1. $3\frac{1}{2}$ inches
2. $2\frac{1}{2}$ inches
3. 2 inches
4. $4\frac{1}{2}$ inches
5. $\frac{3}{4}$ inch
6. $3\frac{1}{4}$ inches

Page 191

1. 6 cm
2. 4 cm
3. 7 cm
4. 11 cm
5. $2\frac{1}{2}$ cm
6. 8 cm

Page 192

1. 3 decimeters (30 cm)
2. 3 meters (300 cm)
3. 2 yards (72 inches)
4. $\frac{1}{2}$ kilometer (500 meters)

Page 193

1. C
2. A
3. B
4. D
5. A
6. A
7. D
8. B
9. 16 feet (3 yards is only 9 feet)
10. 2 meters (200 cm is shorter than 250 cm)

Page 194

Thin sticks,
thick bricks

Page 195

The sun shines
on shop signs

Page 196

1. kilometer, hectometer, dekameter, meter, decimeter, centimeter, millimeter
2. 100
3. 10
4. 1,000
5. 1,000
6. 100
7. 10

Page 197

1. mile, yard, foot, inch
2. 3
3. 12
4. 5,280
5. 36
6. 24
7. 21
8. 10,560
9. 60
10. 360

Page 198

1. Yes, the board is 36 inches long and they only need 28 inches.
2. 5,280 feet
3. Yes, they only need 3 meters of tape (6 faces times twice across times 25 cm = 300 centimeters, which equals 3 meters).
4. Answers will vary.

Page 199

1. A
2. C
3. D
4. C
5. D
6. C
7. D
8. A
9. Answers will vary: 10 decimeters, 100 centimeters, 1,000 millimeters
10. Answers will vary: 36 inches, 1 yard

Page 200

Truly plural

Page 201

Do drop in at the
Dewdrop Inn

Page 202

1. >
2. <
3. >
4. =
5. <
6. >
7. =
8. <
9. >
10. =

Page 203

1. >
2. >
3. >
4. >
5. <
6. <
7. <
8. >
9. <
10. >

Page 204

1. yes (2 quarts)
2. no (2 quarts + 1 cup)
3. 20 dekaliters
4. 25 milliliters

Page 205

1. D
2. A
3. C
4. A
5. D
6. A
7. B
8. C
9. 16 popsicles
10. No, Nancy will have 0.5 centiliters too much.

Page 206

Glad to meteor

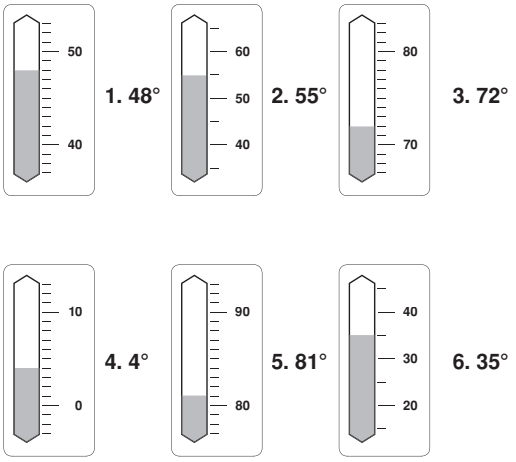
Page 207

Pay and run

Page 208

1. 84°
2. 25°
3. 15°
4. 69°
5. 30°
6. 74°
7. 47°
8. 28°
9. 95°
10. 52°

Page 209



Page 210

1. 48°
2. 87°
3. 79°
4. 39°
5. 31°

Page 211

1. A
2. C
3. B
4. D
5. A
6. D
7. B
8. C
9. thermometer showing 46°
10. thermometer showing 74°

Page 212

A regal rural ruler

Page 213

A tall story

Page 214

1. 68
2. 39
3. 48
4. 26.6
5. Answers will vary.
6. Answers will vary.
7. Answers will vary, but should include an equilateral triangle with three inches on each side.

Page 215

1 184
2. 6
3. 58
4. 16.4
5. Answers will vary.
6. Answers will vary.
7. Answers will vary.

Page 216

1. 130 feet, 13 boards
2. 75 feet, 7 rolls

Page 217

1. D	3. A	5. C	7. A
2. C	4. B	6. D	8. D

9. any rectangle with a perimeter of 24
10. any irregular figure with a perimeter of 16

Page 218

Seven silly swans swam

Page 219

She had a pumpkin for a coach

Page 220

1. 10 square feet
2. 4 square centimeters
3. 16 square inches
4. 576 square feet
5. 450 square meters
6. 2,700 square mm

Page 221

1. 64	4. 16
2. 32	5. 1,470
3. 75	6. 1,792

Page 222

239 square feet; you could find the area of the whole 20 by 17 rectangle minus the two smaller rectangles or you could subdivide the original shape into three smaller rectangles and find the area of each.

Page 223

1. C	3. B	5. C	7. A
2. A	4. D	6. A	8. D

9. any rectangle with an area of 24 square units
10. any rectangle with an area of 24 square units and different dimensions than #9

Page 224

A ducktionary

Page 225

Lot lost lots of locks

Page 226

1. 5:00	3. 6:45	5. 11:28
2. 2:30	4. 10:25	6. 7:15

Page 227

1. 8:45	4. 8:40	7. 11:50
2. 2:30	5. 5:20	8. 7:15
3. 8:00	6. 4:45	9. 10:50

Page 228

1. 2 hours
2. 1 hour 20 minutes
3. 8:00
4. 6 hours 50 minutes
5. 25 minutes

Page 229

1. B	3. A	5. B	7. A
2. D	4. C	6. B	8. C

9. one clock showing 4:45 and another clock showing 7:40
10. 14 hours 55 minutes

Page 231

Cell it

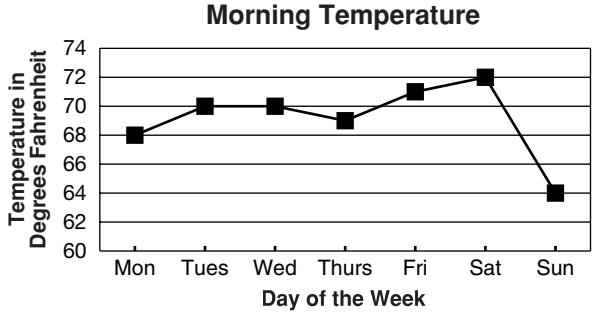
Page 232

Dates

Page 233

Answers will vary. One possible answer:

Day of the Week	Morning Temperature
Monday	68˚
Tuesday	70˚
Wednesday	70˚
Thursday	69˚
Friday	71˚
Saturday	72˚
Sunday	64˚



Page 234

1.

Stem	Leaves
8	4 6 8
9	2 6 8
10	0 0

2.

Stem	Leaves
6	0 4
7	6 8
8	4 8
9	0 2 8
10	0

Page 235

1. Answers will vary, but should allude to the fact of the y-axis starting with 40 instead of 0.
2. Answers will vary: not starting their labels at zero, having line graphs with uneven spaces across the x-axis, etc.
3. Answers will vary.

Page 236

1. A	3. C	5. B	7. B
2. D	4. C	6. D	8. A

9. any pictograph representing data in table
10. answers will vary.

Page 237
A hood

Page 238
Lisa is 3, Tim is 6, Andra is 9, Marta is 10, Andrew is 12, and Juan is 15

Page 239
1. total absences in Mr. Layden's Class
2. students aren't in school in July
3. December
4. February
5. 13
6. 2 weeks off for winter break

Page 240
1. 5
2. 79
3. number of slices of pizza eaten at the class party
4. one student eating that number of slices of pizza
5. Answers will vary: the pictures are similar if the Xs were bars
6. 6
7. Answers will vary.

Page 241

1. 4	2. 1	3. 3	4. 2

Page 242

1. D	4. D	7. D
2. B	5. B	8. A
3. C	6. D	9. 88

10. Answers will vary. For example: because the scale starts with 60.

Page 243
1, 3, and 4 are good questions and make a rectangle.

Page 244
Answers will vary.

Page 245
Answers will vary, for example:
1. What is your favorite soda?
2. Do you like the Denver Broncos?
3. Do you think that girls are more athletic than boys?
4. Should kids be allowed to ride their bikes on the sidewalks?
5. Do you like the band Hi Rocks?
6. Should your city's water be supplied with fluoride?

Page 246
Answers will vary, for example:
1. What if I liked root beer?
2. Mentioning the black Labrador may sway people to say that type more often.
3. What if you have sisters?
4. "A lot" is a vague term.
5. How much does the "average kid" watch?
6. in what ways (training, feeding, costs, etc.)
7. Are we comparing bedroom size or house size?
8. The negative makes it unclear if you say yes to what you're saying yes to.

Page 247
Answers will vary.

Page 248

1. A	3. D	5. A	7. D
2. B	4. D	6. C	8. C

9. Answers will vary.
10. Answers will vary.

Page 249
Let lame lambs live

Page 250
Toadstools

Page 251

1. 42	3. 98	5. 94
2. 107	4. 39	6. 65

Page 252

1. 18	4. 33	7. 60	10. 55
2. 53	5. 33	8. 20	
3. 35	6. 40	9. 56	

Page 253
1. 73
2. 16 or 19
3. 2 numbers greater than or equal to 19
4. 2 numbers greater than or equal to 19 and less than 29
5. no change

Page 254

1. D	3. B	5. A	7. C
2. A	4. B	6. C	8. D

9. Answers will vary.
10. Answers will vary.

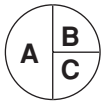
Page 255
Answers will vary.
Challenge: No, there is no advantage.

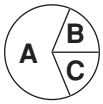
Page 256
Answers will vary.
Challenge: No, there is no advantage.

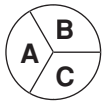
Page 257
Answers will vary. (For question 3, the larger the sample size, the closer to ½ of the sample will have heads and ½ of the sample will have tails.)

Page 258
Answers will vary.

Page 259
Answers will vary, one possible answer could be:

1. 

2. 

3. 

Page 260
1. Answers will vary.

2. Answers will vary, one possible answer could be:

Page 261
Knee deep, deep knee

Page 262
Doughnuts

Page 263

1. $\frac{1}{6}$	5. $\frac{3}{6}$ or $\frac{1}{2}$	9. $\frac{3}{8}$
2. $\frac{1}{6}$	6. 0	10. $\frac{2}{8}$ or $\frac{1}{4}$
3. $\frac{2}{6}$ or $\frac{1}{3}$	7. $\frac{1}{2}$	11. 0
4. $\frac{3}{6}$ or $\frac{1}{2}$	8. $\frac{1}{2}$	12. $\frac{5}{8}$

Page 264

1. $\frac{1}{6}$	5. $\frac{3}{6}$ or $\frac{1}{2}$	9. 0
2. $\frac{1}{6}$	6. 0	10. $\frac{3}{8}$
3. $\frac{2}{6}$ or $\frac{1}{3}$	7. $\frac{5}{8}$	11. $\frac{3}{8}$
4. $\frac{3}{6}$ or $\frac{1}{2}$	8. $\frac{3}{8}$	12. $\frac{2}{8}$ or $\frac{1}{4}$

Page 265
1. Beth: $\frac{5}{8}$ white (only $\frac{3}{8}$ blue)
2. $\frac{1}{28}$
3. $\frac{1}{25}$
4. fair; even and odd both are $\frac{1}{2}$
5. No, each player will move the same number of turns, but Player B will get to move an average of 7 spaces, while Player A only moves an average of 4 spaces.

Page 266

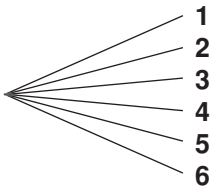
1. D	4. A	7. C	10. $\frac{1}{22}$
2. C	5. D	8. B	
3. C	6. A	9. $\frac{1}{2}$	

Page 267
Answers will vary, but should include 12 different outfits.

Page 268
Launch

Page 269
1. 6 2. 9 3. 12

Page 270
1.



2.

A-1	B-1	C-1
A-2	B-2	C-2
A-3	B-3	C-3
A-4	B-4	C-4
A-5	B-5	C-5
A-6	B-6	C-6

3. 12 combinations
4. $\frac{6}{36}$ or $\frac{1}{6}$

Page 271
1. Another color (e.g., white)
2. Another vehicle (e.g., car)
3. Another characteristic (e.g., 2-door and 4-door)

Page 272

1. A	3. D	5. B	7. D
2. C	4. B	6. B	8. D

9. 11 sums
10. 16 combinations with sums ranging from 2 to 8

Page 274
Timed Test 1

10	2	2	2
11	3	8	0
5	10	7	8
10	15	6	10
12	9	4	0
11	16	8	7
6	3	6	8
9	8	3	16
3	11	0	7
5	7	18	6
6	9	7	6
5	16	3	4
12	16	5	9
7	5	12	4
8	2	10	10
13	0	14	8
5	7	10	12
5	10	14	10
14	9	4	1
12	4	15	13
1	3	4	3
0	9	8	2
11	6	14	10
8	13	19	5
20	10	3	10

Page 275
Timed Test 2

10	6	4	9
16	7	1	14
5	18	1	11
2	10	5	5
4	9	9	9
1	3	8	8
9	3	8	10
8	1	0	11
1	7	3	10
4	8	1	5
9	12	0	2
1	7	8	6
4	2	10	3
7	0	11	17
5	0	11	6
15	13	17	13
6	9	9	9
13	14	10	5
8	5	9	15
18	1	1	14
7	7	4	8
12	9	13	2
1	6	10	4
6	7	6	5
3	12	4	7

Page 276
Timed Test 3

30	100	16	0
0	24	2	0
27	45	0	36
42	2	42	63
24	0	24	80
6	20	18	25
28	20	20	63
45	6	0	40
24	0	0	54
12	7	49	0
6	40	54	18
20	72	80	18
48	9	8	0
14	60	12	30
5	15	48	3
70	40	14	10
0	4	12	9
32	35	0	60
21	72	0	56
10	6	50	36
0	9	40	64
35	0	30	0
8	21	32	8
12	50	16	81
56	27	4	4

Page 277
Timed Test 4

48	0	8	30
9	2	5	60
40	48	12	56
49	24	7	81
24	8	27	20
18	9	32	20
16	16	42	4
36	35	35	4
0	7	54	1
30	36	40	0
3	80	100	12
0	0	6	30
5	3	6	0
15	0	0	45
16	25	20	72
90	24	10	30
40	14	32	0
8	72	63	4
0	28	18	24
14	18	10	0
40	9	10	50
28	18	8	54
6	10	0	42
0	45	15	20
60	70	12	21

Page 278
Timed Test 5

4	1	2	10
6	0	7	7
7	1	10	6
8	4	9	4
9	6	7	3
2	10	2	1
4	9	1	6
3	6	9	6
5	4	9	8
3	3	8	9
1	0	5	7
2	2	6	9
3	5	7	10
5	7	5	2
7	9	5	1
8	8	7	0
9	4	8	3
10	1	9	4
0	2	0	5
10	0	3	4
6	5	6	7
8	8	3	2
10	6	2	3
7	5	4	10
2	4	8	1

Page 279
Timed Test 6

9	3	6	3
8	4	4	2
1	6	5	1
2	9	8	0
5	9	9	5
8	10	10	8
10	10	8	8
3	0	2	10
0	3	1	5
4	4	4	2
2	6	8	3
3	7	9	5
7	7	10	6
8	1	3	9
10	2	4	10
4	2	3	2
5	5	1	0
6	7	6	3
7	7	7	4
6	10	8	6
9	5	9	7
7	5	10	6
0	2	9	9
1	0	5	1
0	4	4	7

Page 280
Timed Test 7

64	42	7	25
5	10	2	10
4	8	0	6
10	2	1	0
5	40	24	20
8	30	54	35
9	1	35	5
10	16	54	9
2	9	3	9
21	10	7	80
45	14	0	6
24	0	10	3
7	0	2	3
10	3	2	49
90	60	27	18
1	6	8	3
24	3	6	8
4	16	36	40
7	70	12	7
0	0	12	8
6	4	4	40
0	100	9	0
5	6	63	4
8	0	1	6
9	40	5	4

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Timed Test 8

0	0	30	20
28	0	5	9
30	18	6	2
3	5	8	32
56	48	72	3
1	6	2	0
80	8	15	18
5	3	4	9
7	8	7	8
81	0	10	16
9	0	0	50
6	1	6	9
15	1	48	20
2	4	5	0
1	9	2	60
5	36	32	5
7	10	70	4
30	72	8	42
28	0	6	7
27	4	56	20
12	4	8	2
3	6	9	2
4	0	50	21
4	45	3	10
12	1	2	8

The Author

Wes Tuttle

Wes began his teaching career as a junior high mathematics teacher in California. After completing a master's degree in gifted education at the University of Northern Colorado, Wes coordinated the gifted program and taught at Christa McAuliffe Elementary School in Greeley, Colorado. He served as the school's Teacher on Special Assignment, developing curriculum guidelines and monitoring compliance with state and national standards. In addition to serving as a principal, Wes coordinates district math curriculum development and delivery and is completing his doctorate in educational leadership.

Correlated to State and Common Core State Standards

BASIC Math Skills

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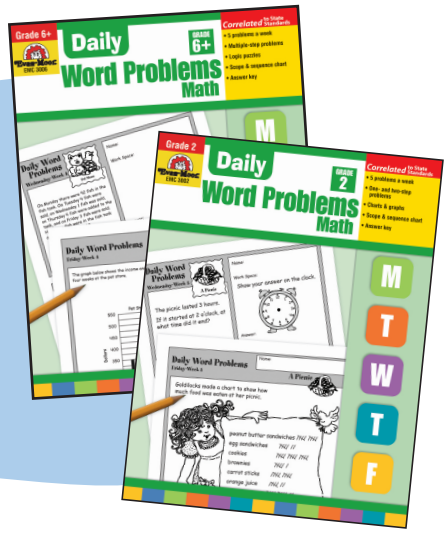
Grade 2	EMC 3015	Grade 5	EMC 3018
Grade 3	EMC 3016	Grade 6	EMC 3019

Daily Word Problems



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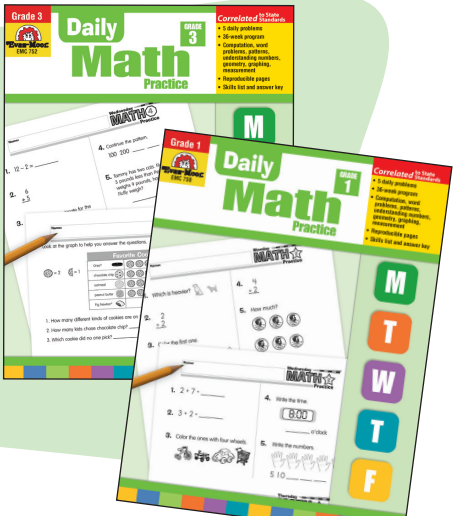

Based on current NCTM standards, these books are grade appropriate, educationally sound, and designed to support your curriculum.

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- Practice five items a day Monday through Thursday
- Friday's lesson contains a more extensive problem that emphasizes reasoning and communication in mathematics
- Answer key and scope and sequence chart included
- 112 pages each

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Grade 4	EMC 753
Grade 5	EMC 754
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