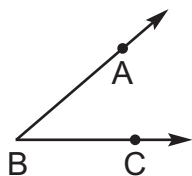




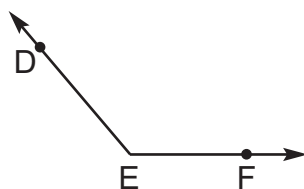
## Vertex; Naming Angles

The point where the two rays of an angle meet is called the **vertex**.

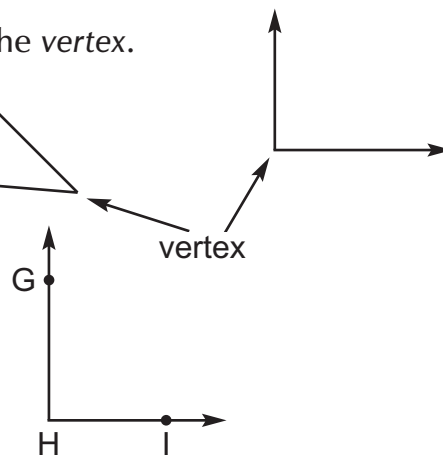
If an angle is marked with three points we can name it. Name one point, then name the vertex, then name the other point.



This is Angle ABC  
or Angle CBA



This is Angle DEF  
or Angle FED



This is Angle GHI  
or Angle IHG

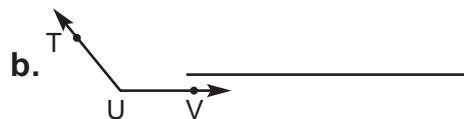
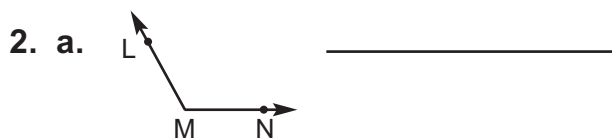
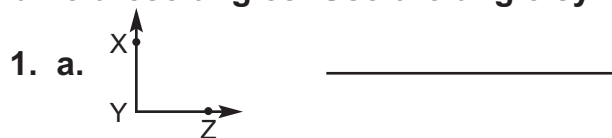
★ Remember: When naming an angle, start at either end, but the vertex must be in the middle. ★

To make it even easier we can replace the word angle with a tiny acute angle symbol like this:

Angle ABC can be written  $\angle ABC$ .

Angle IHG can be written  $\angle IHG$ .

**Name these angles. Use the angle symbol.**





# We Remember

Write multiples of 3 and 5. Circle the common multiples.

3. \_\_\_\_\_

4. \_\_\_\_\_

5. Common multiples of 3 and 5 are \_\_\_\_\_.

6. The LCM (lowest common multiple) of 3 and 5 is \_\_\_\_\_.

Write the products.

7.  $\begin{array}{r} 11 \\ \times 9 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 11 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 5 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 7 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 6 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 10 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 3 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 8 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 4 \\ \hline \end{array}$      $\begin{array}{r} 11 \\ \times 2 \\ \hline \end{array}$

Estimate.

8. a. estimate  $604 \times 827$

\_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

b. estimate  $159 \times 53$

\_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

## Skill Builders $+$ $-$ $\times$

9. a.  $\begin{array}{r} 10 \\ - 4\frac{5}{10} \\ \hline \end{array}$

b.  $\begin{array}{r} 8 \\ - 1\frac{4}{5} \\ \hline \end{array}$

c.  $\begin{array}{r} 11 \\ - 2\frac{1}{13} \\ \hline \end{array}$

d.  $\begin{array}{r} 96,302 \\ - 74,185 \\ \hline \end{array}$

e.  $\begin{array}{r} \frac{3}{10} \\ + \frac{4}{10} \\ + \frac{2}{10} \\ \hline \end{array}$

10. a.  $3 \overline{)88}$

b.  $9 \overline{)470}$

c.  $\begin{array}{r} 26,804 \\ 37,915 \\ + 48,026 \\ \hline \end{array}$

d.  $\begin{array}{r} 604 \\ \times 827 \\ \hline \end{array}$

e.  $\begin{array}{r} 470 \\ \times 369 \\ \hline \end{array}$

## Lesson 4

11. Three official languages are used in Bolivia.

They are Spanish, Quechua, and Aymara.

$\frac{7}{20}$  of the people speak Spanish. What fraction of the people do not speak Spanish?

\_\_\_\_\_ of the people do not speak Spanish.

Hint: Subtract from 1.

My Work Space

☆ 12. Is this more or less than  $\frac{1}{2}$ ?  $\frac{13}{20}$  ☐  $\frac{1}{2}$

**Find the areas.** Remember, area is measured in square units.

13. A square that measures 4 inches on each side. \_\_\_\_\_

14. A rectangle that is 6 cm by 2 cm. \_\_\_\_\_

**Think where the numbers would be if the number line were longer. Write < or > .**



15. a.  $-12$  ☐  $-15$       b.  $2$  ☐  $-11$       c.  $-4$  ☐  $-10$       d.  $-6$  ☐  $1$

**Continue making the graph on page iv by following these directions.**

△ 16. Decide how many bars you need and label them at the bottom of the graph.

△ 17. Use a ruler to draw bars to the correct height.

**Complete the analogies.**

18.  $32^{\circ}\text{F}$  : freezing : :  $212^{\circ}\text{F}$  : \_\_\_\_\_

19. denominator : numerator : : bottom : \_\_\_\_\_

A water pipe with a small hole the size of a pencil lead can leak up to 500 gallons of water per day!

**Underline the correct choice.**

20. If the rainy season in Bolivia lasts from December through February, and Sandra's vacation to Bolivia is in January, then Sandra **will, will not** need her umbrella.

# Mental Math . . . ?

21. a.  $30 + \underline{\hspace{2cm}} = 100$       b.  $50 + \underline{\hspace{2cm}} = 100$       c.  $60 + \underline{\hspace{2cm}} = 100$

22. a.  $92 - 5 = \underline{\hspace{2cm}}$       b.  $46 - 9 = \underline{\hspace{2cm}}$       c.  $54 - 7 = \underline{\hspace{2cm}}$

Put the digits in the correct places on these lines.

23.                     ,                     ,                     

Write a 4 in the hundreds place.

Write a 2 in the millions place and 5 in the tens place.

Write an 8 in the ten thousands place and a 6 in the hundred millions place.

Write a 5 in the ones place and a 1 in the hundred thousands place.

Write a 0 in the ten millions place and in the thousands place.

Read the fact and write the ratio.

Chocolate is made from the cacao tree, which grows wild in Bolivia. The cacao tree's fruit is a bean that is used to make cocoa and milk chocolate. In the wild, a cacao tree may grow 12 meters tall. Cultivated cacao trees grow only about 8 meters tall.



24. Height of cultivated cacao tree to wild cacao tree                     

Find the volume of the rectangular solid.

25. 6 cm long, 2 cm wide, and 7 cm high                                     

Connect the points and add arrows to make the following angles. Make sure the vertex is the middle letter.

26. a. Draw  $\angle ABC$ .



b. Draw  $\angle BAC$ .



c. Draw  $\angle BCA$ .



Write *acute*, *obtuse*, or *right*.

27. a.  $\angle ABC$                      

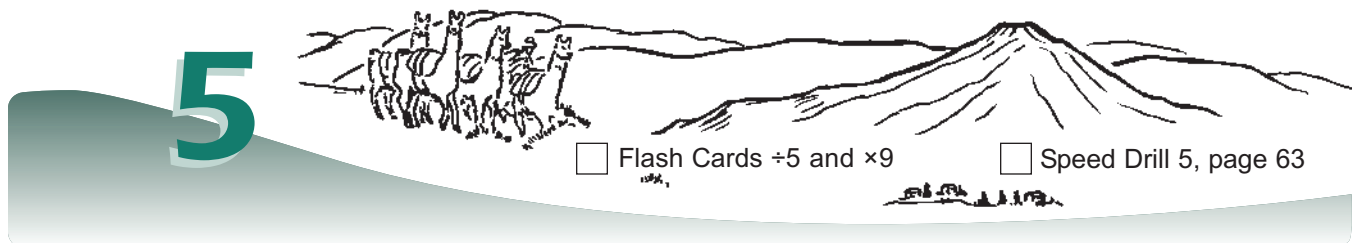
b.  $\angle BAC$                      

c.  $\angle BCA$

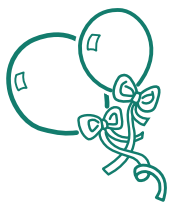
## Lessons 4, 5

Complete the sentence.

28. a. 59.62 has \_\_\_\_\_ hundredths, \_\_\_\_\_ tenths, \_\_\_\_\_ tens, and \_\_\_\_\_ ones.



Tell your teacher when you are ready for Quiz 1.



## Just for Fun

### Completing Logic Grids

Complete the logic grid below to find each child's favorite fruit. Each child's favorite fruit is different.

Clue 1: Veronica, Roberto, and Raquel all like juicy fruit.

Clue 2: Veronica and Raquel cannot eat their favorite fruit without peeling it.

Clue 3: Raquel's fruit is round.

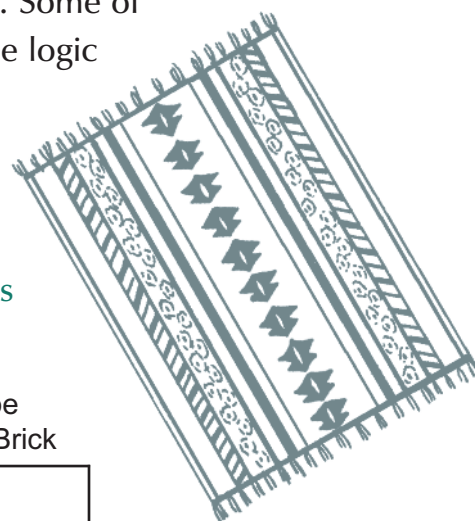
1.

|           | Veronica | Roberto | José | Raquel |
|-----------|----------|---------|------|--------|
| Banana    |          |         |      |        |
| Apple     |          |         |      |        |
| Pineapple |          |         |      |        |
| Orange    |          |         |      |        |

At school one day, *el maestro* (the teacher) told the students that each should bring something he had made to show the others. Some of the girls brought woven blankets and embroidery. Use the logic grid to find out what some of the boys brought.

Clue 1: Marcos did not use wood or mud for his project.

Clue 2: Pedro left his project at school for the students and *el maestro* to use for storing their books.



2.

|        | Paper Piñata | Bookshelf | Adobe<br>Mud Brick |
|--------|--------------|-----------|--------------------|
| José   |              |           |                    |
| Pedro  |              |           |                    |
| Marcos |              |           |                    |

6



☐ Flash Cards Set L and  $\times 5$

☐ Speed Drill 6, page 63

## Simplifying With Parentheses

When simplifying long expressions, you know we follow a special order to do the math. We always work from left to right. First we do all the multiplication and division. Then we do the addition and subtraction.

If we want to show a different order, we must use parentheses around the parts to be done first. So, now the correct order is:

**Step 1**

Do what is in parentheses ( ).

**Step 2**

Do the multiplication and division in the order they appear.

**Step 3**

Do the addition and subtraction in the order they appear.

1. ( )
2.  $\times$  and  $\div$
3.  $+$  and  $-$

## Lesson 6

Study the example:

Simplify  $(12 - 2) \div 5 + 4 \times 5$

**Step 1**

Do what is in

parentheses first.  $\rightarrow \underbrace{(12 - 2)}_{10} \div 5 + 4 \times 5$

**Step 2**

Do all the multiplication

and division next.  $\rightarrow \underbrace{10 \div 5}_2 + \underbrace{4 \times 5}_{20}$

**Step 3**

Do all the addition and

subtraction last.  $\rightarrow \underbrace{2 + 20}_{22}$

1. ( )
2.  $\times$  and  $\div$
3.  $+$  and  $-$

Simplify these expressions in the correct order.

1. a.  $(7 + 2) \times 4 - 8 \times 4$

( ) \_\_\_\_\_

$\times, \div$  \_\_\_\_\_

simplified \_\_\_\_\_

b.  $6 \times (49 \div 7) + 4 \times 3$

( ) \_\_\_\_\_

$\times, \div$  \_\_\_\_\_

simplified \_\_\_\_\_

c.  $(8 + 7) \div 3 \times 10$

( ) \_\_\_\_\_

$\times, \div$  \_\_\_\_\_

simplified \_\_\_\_\_

2. a.  $16 - 40 \div (5 \times 2)$

b.  $3 \times (4 + 6) \div (4 + 2)$

c.  $(6 - 3) \times (6 \div 3) + 6$



## We Remember

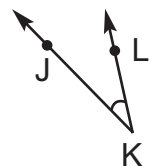
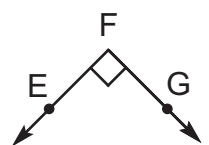
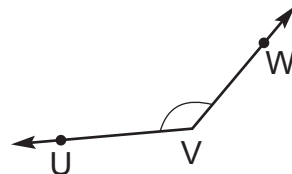
Complete the sentences.

3. The right angle is named \_\_\_\_\_.

4. The angle that is more than  $90^\circ$  is named \_\_\_\_\_.

5. The vertex of the angle that is less than  $90^\circ$  is point \_\_\_\_\_.

6.  $\overline{KJ}$  is about \_\_\_\_\_ centimeters long. Round to the nearest centimeter.



# Skill Builders $+$ $-$ $\times$

Write remainders as fractions.

$$7. \text{ a. } \begin{array}{r} 1 \\ - \frac{2}{14} \end{array}$$

$$\text{b. } \begin{array}{r} \frac{11}{56} \\ + \frac{3}{56} \end{array}$$

$$\text{c. } \begin{array}{r} 48,265 \\ - 28,915 \end{array}$$

$$\text{d. } \begin{array}{r} 14,875 \\ + 20,396 \end{array}$$

$$\text{e. } \begin{array}{r} 36 \\ \times 29 \end{array}$$

$$8. \text{ a. } 6 \overline{)90}$$

$$\text{b. } 3 \overline{)55}$$

$$\text{c. } \begin{array}{r} 482 \\ \times 96 \end{array}$$

$$\text{d. } \begin{array}{r} 367 \\ \times 45 \end{array}$$

$$\text{e. } \begin{array}{r} 48 \\ \times 15 \end{array}$$

Write the number.

9. Seven hundred ninety-two million, four hundred three thousand, eight

\_\_\_\_\_

Write multiples of 12 and 6. Circle the common multiples.

10. \_\_\_\_\_

11. \_\_\_\_\_

12. Common multiples of 12 and 6 are \_\_\_\_\_.

13. The LCM (lowest common multiple) of 12 and 6 is \_\_\_\_\_.

Write the numbers.

14. A year has 12 months.  $\frac{1}{6}$  year is \_\_\_\_\_ months.

15. A pound has 16 ounces.  $\frac{1}{8}$  pound is \_\_\_\_\_ ounces.



## Lesson 6

16. There are 1.5 liters of water in the bucket. Mama needs 3.0 liters of water to make soup. How much more water does she need?

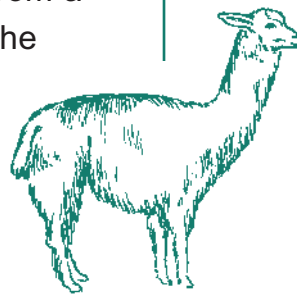
\_\_\_\_\_

My Work Space

17. An alpaca is a llamalike animal that lives high in the Bolivian mountains. Its wool is used to make soft, warm cloth. Wool from a large alpaca weighed 2.8 kg. Wool from a smaller alpaca weighed 1.9 kg. Find the weight of wool from both alpacas.

\_\_\_\_\_

My Work Space



**Read the facts and write the ratio.**

Llamas and alpacas are both useful animals to the Bolivian people. The larger llama stands 122 cm tall at the shoulder. It can carry loads along narrow mountain trails. The smaller alpaca may be only 118 cm tall at the shoulder. It has long, soft hair that the Bolivians shear and make into warm wool blankets.

18. Height of llama to height of alpaca \_\_\_\_\_

**Round to the nearest whole number.**

19. a. 64.7 \_\_\_\_\_ b. 58.5 \_\_\_\_\_ c. 3.5 \_\_\_\_\_ d. 65.2 \_\_\_\_\_

**Complete the graph on page iv.**

- △20. Add a title to your graph.

**Complete this function chart.**

21.

|         |   |   |    |   |    |    |    |
|---------|---|---|----|---|----|----|----|
| gallons | 1 | 6 |    | 3 |    | 11 | 10 |
| quarts  | 4 |   | 16 |   | 48 |    |    |

