

1. Find the property that each equation shows. Write the equation in the correct box.

$$11 \times (4 \times 6) = (11 \times 4) \times 6$$

$$14 + 27 + 18 = 27 + 14 + 18$$

$$15 + (12 + 11) = (15 + 12) + 11$$

$$18 \times 2 = 2 \times 18$$

$$5 \times 1 = 5$$

$$72 + 0 = 72$$

Commutative Property of Multiplication	Associative Property of Addition	Identity Property of Addition
Commutative Property of Addition	Associative Property of Multiplication	Identity Property of Multiplication

2. 3.67 is 10 times as much as 

0.367
3.67
36.7
367

 and  $\frac{1}{10}$  of 

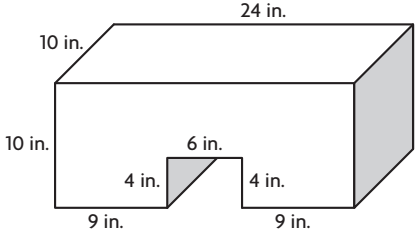
0.367
3.67
36.7
367

.

3. Mario is making dinner for 9 people. Mario buys 6 containers of soup. Each container is 18 ounces. If everyone gets the same amount of soup, how much soup will each person get?

\_\_\_\_\_ ounces

4. Jason used large blocks for an art project. What is the volume of the shape he made?



\_\_\_\_\_ cubic inches

5. 0.2

<
>
=

two tenths

6. For numbers 6a–6d, tell which expressions require you to rename mixed numbers before you can subtract. Find each difference. Write each expression and the difference in the correct box.

6a.  $5\frac{2}{5} - 2\frac{1}{4}$

6c.  $7\frac{2}{3} - 6\frac{1}{8}$

6b.  $5 - 2\frac{7}{8}$

6d.  $9\frac{1}{6} - 5\frac{2}{3}$

Requires Renaming

Does Not Require Renaming

7. The table shows the equations Mr. Berger discussed in math class today.

Equations
$4 \times 10^0 = 4$
$4 \times 10^1 = 40$
$4 \times 10^2 = 400$
$4 \times 10^3 = 4,000$

Explain the pattern of zeros in the product when multiplying by powers of 10.



8. Ursula mixed  $3\frac{1}{8}$  cups of dry ingredients with  $1\frac{2}{5}$  cups of liquid ingredients. For numbers 8a–8c, estimate the amount of ingredients Ursula used. Choose the correct benchmarks and sum.

8a. Ursula used about \_\_\_\_\_ cups of dry ingredients.

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

8b. Ursula used about \_\_\_\_\_ cup(s) of liquid ingredients.

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

8c. Ursula used about \_\_\_\_\_ cups of ingredients.

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

9. Tommy has 5 jars of marbles. Each jar is  $\frac{2}{3}$  filled with marbles. How many jars of marbles does Tommy have? Shade the model and complete the calculations to show how you found your answer.



$$5 \times \frac{2}{3} = \frac{\boxed{\phantom{000}}}{3} = \underline{\hspace{2cm}} \text{ jars of marbles}$$

10. Write 247.903 in expanded form.



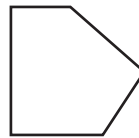
**11.** Stacey worked on her garden for  $4\frac{3}{4}$  hours. Josh worked on his garden  $\frac{2}{3}$  times as long as Stacey. Vicki worked on her garden  $1\frac{3}{8}$  times as long as Stacey. Which statements are true? Mark all that apply.

- A** Stacey worked longer on her garden than Josh worked on his garden.
- B** Stacey spent less time working on her garden than Vicki spent on her garden.
- C** Josh worked longer on his garden than Vicki worked on her garden.
- D** Stacey worked in her garden more than Josh and Vicki.

**12.** Ten pounds of rice are distributed equally into 6 bags to give out at the food bank. How many pounds of rice are in each bag?

\_\_\_\_\_ pounds

**13.** Mr. Diaz is building a fence around his yard. For numbers 13a–13b, choose the values and term that correctly describe the shape of Mr. Diaz’s fence.



13a. The figure has 

3
4
5

 sides and 

0
5
6

 vertices.

13b. None of the sides are congruent, so the figure is

a regular polygon
not a polygon
not a regular polygon

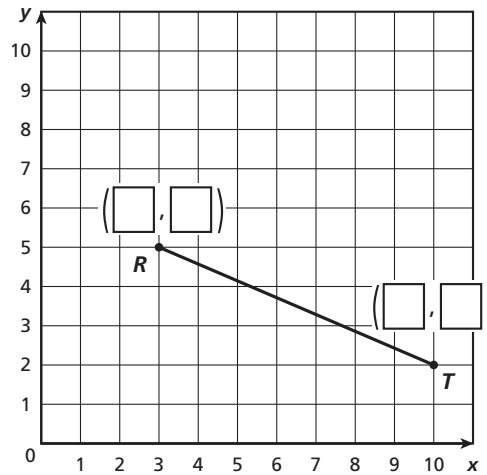
**14.** Erica earned 30,000 bonus points on her computer assignment. This is 10 times as many points as she earned last week. How many bonus points did Erica earn last week?

\_\_\_\_\_ points



- 15.** Use the numbers to complete the ordered pairs that represent the endpoints of line segment  $RT$ .

2	3
5	8
9	10



- 16.** A small stadium can sell up to 6,768 tickets per event.

**Part A**

If tickets sold out for 143 baseball games, how many tickets were sold for those games in all?

\_\_\_\_\_ tickets

**Part B**

The stadium also hosts concerts. If tickets sold out for 102 concerts, how many tickets were sold for the concerts in all?

\_\_\_\_\_ tickets

- 17.** Flora bought 4.13 pounds of tuna salad and 2.7 pounds of chicken salad. Which statement is true?

- A** Rounded to the nearest whole number, Flora bought 4 pounds of tuna salad.
- B** Rounded to the nearest tenth, Flora bought 4.3 pounds of tuna salad.
- C** Rounded to the nearest whole number, Flora bought 2 pounds of chicken salad.



18. Your teacher gives you the problem  $5 \div \frac{1}{4}$ .

**Part A**

Write a story problem to represent  $5 \div \frac{1}{4}$ .

**Part B**

Use a related multiplication expression to solve your story problem. Show your work.

19. Marie plants flowers in a planter that is  $1\frac{1}{2}$  feet long and  $1\frac{2}{3}$  feet wide. She plans to cover the entire area with fertilizer. How much area will she need to spread with fertilizer? Draw a rectangle to help you solve.

\_\_\_\_\_ square feet

20. Rowanda jogged 2.14 kilometers farther than Terrance. Select the values that could represent how far each student jogged. Mark all that apply.
- A Rowanda: 6.5 km, Terrance: 4.36 km
  - B Rowanda: 4.8 km, Terrance: 2.76 km
  - C Rowanda: 3.51 km, Terrance: 5.65 km
  - D Rowanda: 7.24 km, Terrance: 5.1 km

21. Without multiplying, classify each product as being less than  $\frac{3}{5}$ , equal to  $\frac{3}{5}$ , or greater than  $\frac{3}{5}$ . Write the letter of each expression in the correct box.

**A**  $\frac{3}{5} \times \frac{1}{2}$    **B**  $\frac{3}{5} \times \frac{2}{3}$    **C**  $\frac{3}{5} \times \frac{5}{4}$    **D**  $\frac{3}{5} \times \frac{3}{1}$    **E**  $\frac{3}{5} \times \frac{7}{7}$    **F**  $\frac{3}{5} \times 2$

Less Than  $\frac{3}{5}$

Equal to  $\frac{3}{5}$

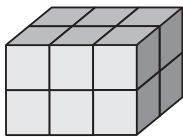
Greater Than  $\frac{3}{5}$

22. Jerome filled bags with trail mix. The weights of the bags are  $\frac{1}{8}$ -lb,  $\frac{1}{4}$ -lb,  $\frac{1}{4}$ -lb,  $\frac{1}{2}$ -lb,  $\frac{1}{8}$ -lb,  $\frac{1}{4}$ -lb,  $\frac{3}{8}$ -lb,  $\frac{1}{2}$ -lb,  $\frac{1}{8}$ -lb,  $\frac{1}{4}$ -lb,  $\frac{1}{8}$ -lb,  $\frac{1}{4}$ -lb,  $\frac{1}{8}$ -lb,  $\frac{1}{8}$ -lb,  $\frac{1}{4}$ -lb, and  $\frac{3}{8}$ -lb. Organize the information in a line plot.

What is the average weight of the bags?

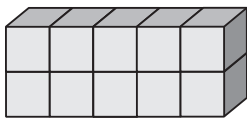
\_\_\_\_\_ pound(s)

23. Match the figure with the number of unit cubes that would be needed to build each figure. Not every number of unit cubes will be used.



•

• 9 unit cubes



•

• 10 unit cubes

• 12 unit cubes

• 15 unit cubes

24. For numbers 24a–24c, write the number that completes the equation.

24a.  $6 \div \square = 12$

24b.  $\frac{1}{3} \div \square = \frac{1}{24}$

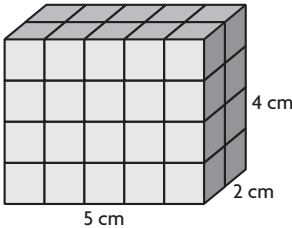
24c.  $4 \div \frac{1}{7} = \square$

GO ON

Name \_\_\_\_\_

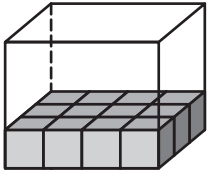
**25.** A shipping container holds 36 shoe boxes. The dimensions of a shoebox are 4 inches by 5 inches by 8 inches. What is the volume of the shipping container? Explain how you found your answer.

**26.** Darnell used 1-centimeter cubes to build the rectangular prism shown. Find the volume of the rectangular prism Darnell built.



\_\_\_\_\_ cubic centimeters

**27.** Marsha packed 1-inch cubes into a box with a volume of 36 cubic inches. How many layers of 1-inch cubes did Marsha pack?



\_\_\_\_\_ layers

**28.** Kristin drew a triangle with 3 congruent sides and 3 congruent angles. Which term accurately describes the triangle? Mark all that apply.

- A** equilateral
- B** scalene
- C** acute
- D** obtuse

