

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. Select other ways to write 304,672. Mark all that apply.

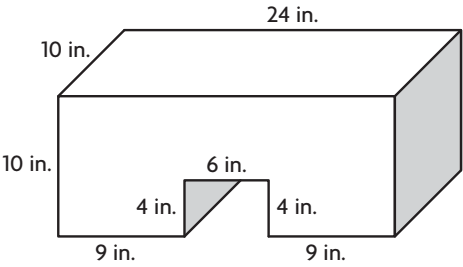
- Ⓐ $(3 \times 100,000) + (4 \times 1,000) + (6 \times 100) + (7 \times 10) + (2 \times 1)$
- Ⓑ three hundred forty thousands, six hundred seventy-two
- Ⓒ $300,000 + 4,000 + 600 + 70 + 2$
- Ⓓ 30 hundred thousand + 4 thousands + 6 hundreds + 70 tens + 2 ones

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. What is the volume of the composite figure?



_____ cubic inches

5. 0.2

<
>
=

0.20

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.



$5 \times \frac{2}{3} = \frac{\square}{3} = \underline{\hspace{2cm}}$ jars of marbles

10. Write 247.903 in expanded form.



Name _____

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. For numbers 11a–11c, select Yes or No to indicate whether each statement is correct.

11a. Stacey worked longer on her garden than Josh worked on his garden. Yes No

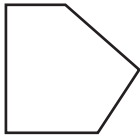
11b. Stacey spent less time working on her garden than Vicki spent on her garden. Yes No

11c. Josh worked longer on his garden than Vicki worked on her garden. Yes No

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

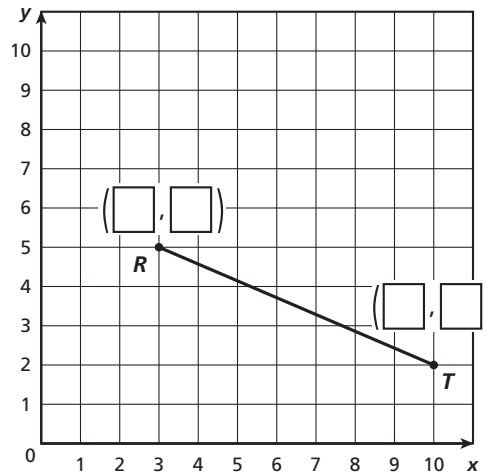
14. Erica earned 30,000 bonus points on her computer assignment. This is 10 times as many points as she earned last week. How many bonus points did Erica earn last week?

_____ 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.** Jodi's best score on a video game is 50 points. Mark's best score on the game is 1.5 times higher than Jodi's best score.

Part A

How many points did Mark score on the video game?

_____ points

Part B

Virginia's best score is only 0.6 times Jodi's best score. How many points did Virginia score on the game?

_____ points

- 17.** Flora bought 4.13 pounds of tuna salad and 2.7 pounds of chicken salad. For numbers 17a–17b, select Yes or No to indicate whether each statement is true.

17a. Rounded to the nearest whole number, Flora bought 4 pounds of tuna salad. Yes No

17b. Rounded to the nearest tenth, Flora bought 4.1 pounds of tuna salad. Yes No



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

Part A

Draw a diagram to represent $5 \div \frac{1}{4}$.

Part B

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

Part C

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?

_____ 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

GO ON 

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 $\frac{3}{5}$

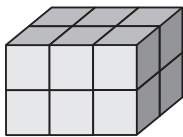
Greater Than $\frac{3}{5}$

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)

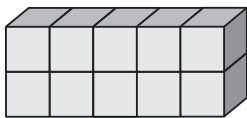
23. Match the figure with the number of unit cubes that would be needed to build each figure. Not every number of unit cubes will be used.



•

• 9 unit cubes

• 10 unit cubes



•

• 12 unit cubes

• 15 unit cubes

24. For numbers 24a–24c, select Yes or No to indicate whether each equation is correct.

24a. $\frac{1}{6} \div 2 = 12$

 Yes

 No

24b. $\frac{1}{3} \div 8 = \frac{1}{24}$

 Yes

 No

24c. $4 \div \frac{1}{7} = 28$

 Yes

 No

GO ON

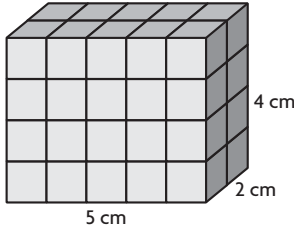
25. A shipping container holds 36 shoe boxes. The dimensions of a shoebox are 4 inches by 5 inches by 8 inches. For numbers 25a–25c, select Yes or No to indicate whether each statement is correct.

25a. Each shoebox has a volume of 160 cubic inches. Yes No

25b. Each container has a volume of about 5,000 cubic inches. Yes No

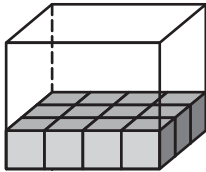
25c. If a container could hold 46 shoeboxes, the volume of the container would be about 7,360 cubic inches. Yes No

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



Party Planning

Tanisha is planning a backyard party. She will serve hamburgers, potato salad, strawberry shortcake, and lemonade. Including Tanisha, 28 people will be at the party. Use this information to help Tanisha plan her party. Show your work. Round all dollar amounts to the nearest cent (nearest hundredth).

1. a. Tanisha's potato salad recipe calls for 3 pounds of potatoes. She decides to make 3.5 times her regular recipe. How many pounds of potatoes should Tanisha buy? Show your work.

Tanisha should buy _____ pounds of potatoes.

- b. Potatoes are sold in 2.25-pound bags. How many whole bags must Tanisha buy in order to have enough potatoes?

Tanisha must buy _____ whole bags.

- c. Potatoes cost \$0.62 per pound. What is the total cost of the bags of potatoes Tanisha needs to buy?

The bags of potatoes cost a total of \$ _____.



Name _____

**Beginning-of-Year
Performance Task**

- 2. a.** Tanisha uses 15.12 pounds of ground beef to make 42 same-size hamburgers. How many pounds of ground beef are in each hamburger?

There are _____ pounds of ground beef in each hamburger.

- b.** If all 28 people at the party get one hamburger, how many people will be able to get second helpings?

_____ people will get second helpings.

- 3.** Tanisha spends \$20.90 on 9.5 quarts of strawberries for the shortcake. What is the price of each quart of strawberries?

The price for each quart of strawberries is \$ _____.



Name _____

**Beginning-of-Year
Performance Task**

4. Tanisha expects that each person will drink two 8-ounce glasses of lemonade at the party. Write an expression to show the words. How many ounces of lemonade does Tanisha need to make?

_____ ounces

5. Tanisha's mother buys 38 lemons. They know it takes 8 lemons to make 80 ounces of lemonade. Does Tanisha need more lemons? If not, how many extra lemons does she have? If so, how many more lemons does she need? Explain how you found your answer.



Name _____

**Beginning-of-Year
Performance Task**

6. Tanisha makes a budget to keep track of her spending on party food. Fill in the blanks in the budget table. Some of the answers will come from questions 1–5.

Item	Amount	Cost of 1 Unit	Total Cost
Potatoes	_____ lbs	\$0.62/lb	\$_____
Hamburger	15.12 lbs	\$2.47/lb	\$_____
Strawberries	9.5 qts	\$_____/qt	\$20.90
Lemons	_____	\$0.12/lemon	\$_____

- a. What is the total cost of food for the party?
- b. If you split the cost of food evenly among the 28 people, what is the cost of food for 1 person?
- c. Tanisha's party food budget is \$75.00. How many more people can she afford to invite to the party? Explain your reasoning.

