

1. Choose the expressions that make the equation true.
Mark all that apply.

$$\frac{8}{15} \div \frac{4}{5} = \underline{\hspace{2cm}}$$

(A) $\frac{1}{3}$

(B) $\frac{2}{3}$

(C) $\frac{20}{60}$

(D) $\frac{40}{60}$

2. Select the expressions that are equivalent to 81. Mark all that apply.

(A) 3^4

(C) $3^3 \times 3$

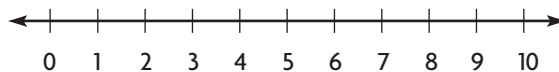
(B) 9^9

(D) $3 \times 3 \times 9$

3. Fernando donates \$2 to a local charity organization for every \$15 he earns. Cleo donates \$4 for every \$17 she earns. Is Fernando's ratio of money donated to money earned equivalent to Cleo's ratio of money donated to money earned? Explain.

4. Manny collected data on the number of quarters in 13 different wallets. Draw a box plot of the data and use it to find the interquartile range and range.

Number of Quarters												
0	5	4	2	3	3	0	1	2	7	5	4	2



Interquartile range

Range

GO ON

5. Four friends are buying healthy snacks at a concession stand. The costs of their snacks are \$1, \$3, \$4, and \$4. For numbers 5a–5c, choose Yes or No to indicate whether the statement is correct.

- 5a. The mean cost for the snacks can be found by adding each cost and dividing that total by 4. Yes No
- 5b. The mean cost of the four snacks is \$3. Yes No
- 5c. The difference between the greatest cost and the mean is \$2. Yes No

6. The table shows the number of books each of three friends bought and the cost. On average, which friend spent the most per book? Use numbers and words to explain your answer.

Friend	Number of Books Purchased	Total Cost (in dollars)	Average Cost (in dollars)
Joyce	1	\$10.95	
Nabil	2	\$40.50	
Kenneth	3	\$51.15	

7. For numbers 7a–7b, choose Yes or No to indicate whether the situation can be represented by a negative number.

- 7a. Ebony used a special camera to take photographs 500 feet below sea level. Yes No
- 7b. Elise deposited \$100 into her checking account. Yes No

8. Select the expressions that are equivalent to $7(p - 4)$. Mark all that apply.

- A $p - 28$ C $7p - 28$
- B $7p - 11$ D $p - 11$



9. The prices of sweat shirts at five different stores are \$6, \$12, \$11, \$15, and \$18. The mean price is \$12.40 and the median price is \$12. Identify the outlier and describe how the mean and median for this data set are affected by it.

10. Identify the quadrant where each point is located. Write each point in the correct box.

 $(-2, -4)$ $(4, 1)$ $(-4, 8)$ $(9, -5)$ $(3, -7)$ $(-1, 5)$

Quadrant I	Quadrant II	Quadrant III	Quadrant IV

11. Elena runs the same distance every day. In 3 days, she ran a total of 12 miles. How far will she run in 7 days? Show your work in the space below.

_____ miles

12. Select the pairs of points that have a distance of 4 units between them. Mark all that apply.

(A) $(3, -10)$ and $(3, -6)$

(C) $(-2, -1)$ and $(-2, -5)$

(B) $(1, 1)$ and $(1, -3)$

(D) $(3, 5)$ and $(3, -1)$

13. Circle $<$, $>$, or $=$.

13a. $-\frac{3}{4}$ $\begin{array}{|c|} \hline < \\ \hline > \\ \hline = \\ \hline \end{array}$ -1

13c. -4 $\begin{array}{|c|} \hline < \\ \hline > \\ \hline = \\ \hline \end{array}$ -2

13b. -5.5 $\begin{array}{|c|} \hline < \\ \hline > \\ \hline = \\ \hline \end{array}$ -3.5

13d. -8 $\begin{array}{|c|} \hline < \\ \hline > \\ \hline = \\ \hline \end{array}$ -12

14. Match the inequality to the word sentence it represents.

$a < 40$ •

•

Tickets cost \$40 or less.

$b \leq 40$ •

•

Owen collected fewer than 40 stickers.

$c > 40$ •

•

More than 40 students went on the trip.

15. Laura collected 12 more autographs than Lance. Let a represent the number of Lance's autographs. Identify the expression that can be used to find the number of autographs that Laura collected.

(A) $12a$

(C) $12a + 2$

(B) $a - 12$

(D) $a + 12$

16. For numbers 16a–16b, choose Yes or No to indicate whether the question is a statistical question.

16a. How many hours did it take Amy to complete the marathon? Yes No

16b. How many hours did Amy spend training each night last week? Yes No

GO ON 

- 20.** While playing a video game Ruth earned 5 base points, b , 9 bonus points, x , and 4 advanced points, a . Write an algebraic expression for the total number of points Ruth scored.
-

- 21.** A teacher surveys her students to find out how much time the students spent studying for a science test on Saturday.

She uses

hours
minutes
seconds

 as the unit of measure.

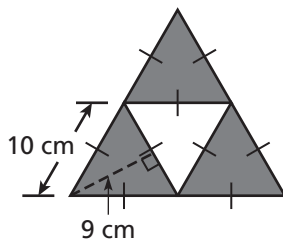
Saturday Study Time (min.)			
45	40	30	40
20	30	35	35
40	30	50	45

She made

12
13
14

 observations.

- 22.** Use the net to find the total surface area of the solid figure it represents. Show your work.



_____ cm ²

- 23.** A cube has side lengths that measure 6 units each. Select the expressions that show the volume of the cube. Mark all that apply.

- A** $2(6 \text{ units} \times 6 \text{ units})$
 C 216 cubic units
 B $3 \times 6 \text{ units}$
 D 36 cubic units



24. For numbers 24a–24d, choose Yes or No to indicate whether the statement is correct.

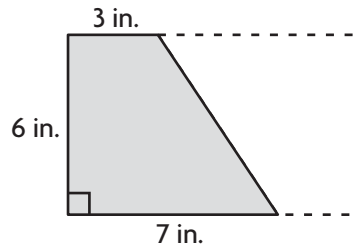
24a. The y -coordinate of any point on the x -axis is 0. Yes No

24b. Point $D(4, 2)$ is to the left of the y -axis and above the x -axis. Yes No

24c. The coordinates of the origin are $(0, 0)$. Yes No

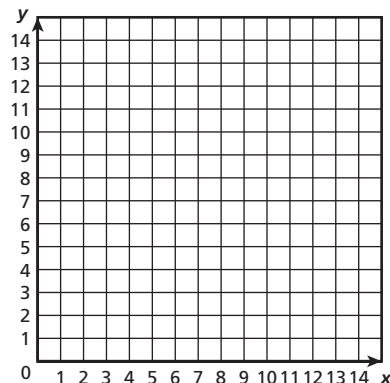
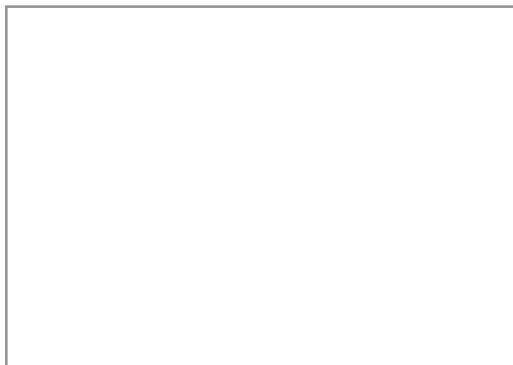
24d. If both the x - and y -coordinates are positive, the point is to the right of the y -axis and above the x -axis. Yes No

25. A photo was cut in half at an angle. What is the area of one of the cut pieces?



The area is _____ in².

26. The coordinates of three points are $A(2, 3)$, $B(11, 7)$, and $C(8, 3)$. Plot and label the points. Using a ruler, connect the points to form polygon ABC . Then explain how subtraction can be used to find the length of AC .



Name _____

27. Richie collected the data shown.

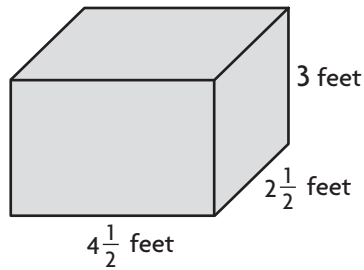
24 26 40 27 37 32

- Calculate the mean. _____
- Calculate the median. _____

28. Abraham has a toy box that is in the shape of a rectangular prism.

The volume is

$33\frac{3}{4}$ ft³.
 $35\frac{1}{2}$ ft³.
 $64\frac{1}{2}$ ft³.



29. Andrew said $|-6|$ does not equal $|6|$. Is Andrew correct?
Draw a number line and use words to support your answer.

Blank area for drawing a number line and supporting the answer.



Name _____

**Middle-of-Year
Performance Task**

9. Gasoline in Mexico is measured in liters. One gallon is equal to 3.785 liters. How many liters would it take to fill a 12-gallon tank?

10. Denine learns that about 3 out of 10 people in Mexico are under the age of 15. What percent of the population is under the age of 15?

11. If the population of Mexico is about 116 million, approximately how many children under the age of 15 are in the country?

