

1. List the measurements in order from greatest to least.

- 36,000 inches
- 1,500 feet
- 1 mile
- 750 yards

Greatest

↓


Least

TEKS 6.2D

2. Art projects include structures made with straws this week.

Number of Projects, $p$	Total Straws, $s$
4	240
8	480
12	720
16	960

Write an equation to show the relationship between the total straws,  $s$ , and the number of projects that can be completed,  $p$ .

Answer: \_\_\_\_\_

TEKS 6.6C

3. The table shows the relationship between the number of gallons of fuel in an automobile and the distance that can be traveled, measured in miles.

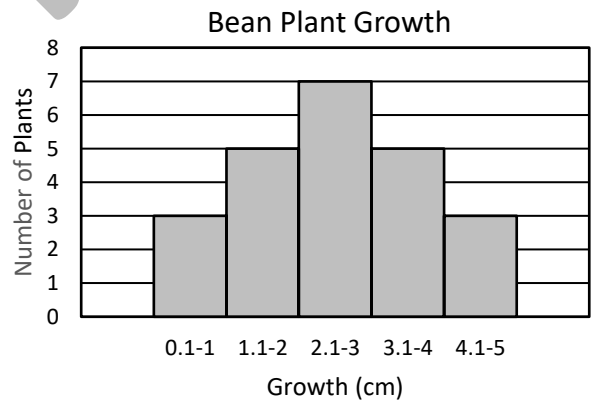
Gallons of Fuel	1	2	3	4
Distance Traveled	24	48	72	96

Which is true? Circle A or B.

A	B
The distance traveled depends on the gallons of fuel.	The gallons of fuel depend on the distance traveled.
<b>Dependent Quantity:</b> Distance Traveled	<b>Dependent Quantity:</b> Gallons of Fuel
<b>Independent Quantity:</b> Gallons of Fuel	<b>Independent Quantity:</b> Distance Traveled

TEKS 6.6A

4. The growth in centimeters of some bean plants is shown in the histogram.

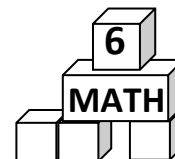


Is the data in this graph symmetrical? \_\_\_\_\_

Based on the shape of the data, in which category should the mean and median occur?

\_\_\_\_\_

TEKS 6.12B



1. Liz has 3 dimes and 8 nickels. She will give one-half of the amount to her little sister. The expression below shows one way to find the amount of money Liz will give to her little sister.

$$\frac{1}{2} (0.30 + 0.40)$$

Write an equivalent expression using the properties stated.

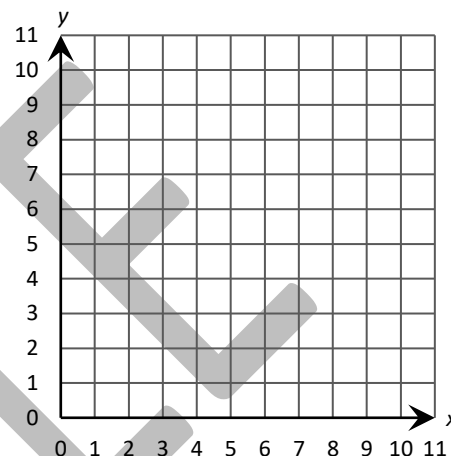
Distributive Property	
Commutative Property	

TEKS 6.7D

2. Dana wrote an equation to represent the whole number pairs that have a sum of 10. Complete the table and graph the points.

$$x + y = 10$$

x	y
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



TEKS 6.6C

3. Two equations are shown below.

$$y = 5x$$

$$y = x + 5$$

Write the equation that matches each description.

Equation	Description
	This equation represents an additive relationship.
	This equation represents a multiplicative relationship.
	In this equation, the value of $y$ is 5 more than the value of $x$ .
	In this equation, the value of $y$ is 5 times the value of $x$ .

TEKS 6.4A

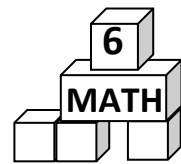
4. A business consultant prepared the table below to show her earnings,  $e$ , based on the number of hours she works,  $h$ .

Number of Hours, $h$	Earnings (dollars), $e$
2	1,250
5	3,125
8	5,000
10	6,250

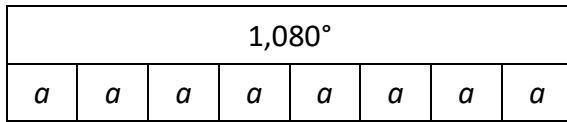
Write an equation that shows the relationship between earnings,  $e$ , and the number of hours spent consulting,  $h$ .

Answer: \_\_\_\_\_

TEKS 6.6B



1. The sum of the angles in a regular octagon total  $1,080^\circ$ . Sharyl drew the model below to help find the measure of each angle,  $a$ .



What is the measure of each angle in a regular octagon?

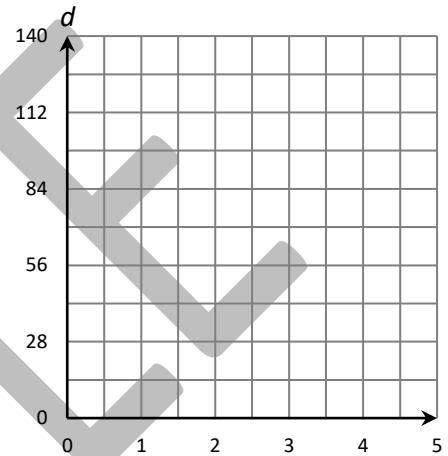
Answer: \_\_\_\_\_

TEKS 6.10A

2. The average speed of a cruise ship is 28 knots per hour. A knot is equal to one nautical mile. Use the equation to find  $d$ , the distance traveled after  $h$  hours. Complete the table, and then graph the points.

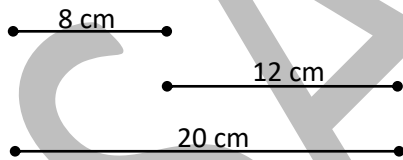
$$d = 28h$$

$h$	$d$
0	
$2\frac{1}{2}$	
3	
$4\frac{1}{2}$	



TEKS 6.6C

3. Phoebe and Natalie disagree. Phoebe insists the lengths of the shorter two sides of a triangle must add up to **more** than the length of the third side. Natalie insists the sum of the two shorter sides **can be equal** to the third side. Consider the three segments below. Can they form a triangle?



Who is correct? \_\_\_\_\_

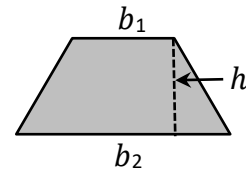
Why? \_\_\_\_\_

\_\_\_\_\_

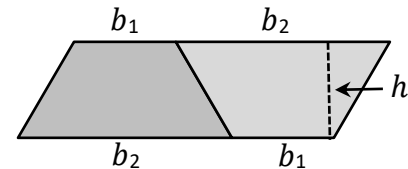
\_\_\_\_\_

TEKS 6.8A

4. A trapezoid, with labeled bases and height, is shown below.



A parallelogram can be the result of combining two congruent trapezoids as shown below.

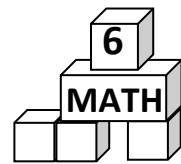


The formula for finding the area of a trapezoid is  $A = \frac{1}{2} (b_1 + b_2)h$ . Why does this formula work?

Answer: \_\_\_\_\_

\_\_\_\_\_

TEKS 6.8B



1. Which inequality is true when  $y = 7$ ?

- A.  $-12y > 84$
- B.  $-12y \geq 84$
- C.  $12y \leq 84$
- D.  $12y < 84$

TEKS 6.10B

2. What is the prime factorization of 150?

- F.  $2 \cdot 3 \cdot 5$
- G.  $2 \cdot 3 \cdot 5^2$
- H.  $2^2 \cdot 3 \cdot 5^2$
- J.  $2^2 \cdot 3^2 \cdot 5$

TEKS 6.7A

3. Omar surveyed all the students in his grade about their favorite San Antonio Spurs basketball player. The table shows the results that were used to make a percentage bar graph.

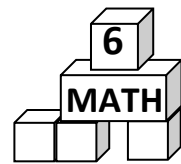
San Antonio Spurs

Player	Number of Students
Kawhi	60
Tony	40
Manu	70
LeMarcus	30

Which percentage bar graph best represents the data?

- A.
- B.
- C.
- D.

TEKS 6.12D

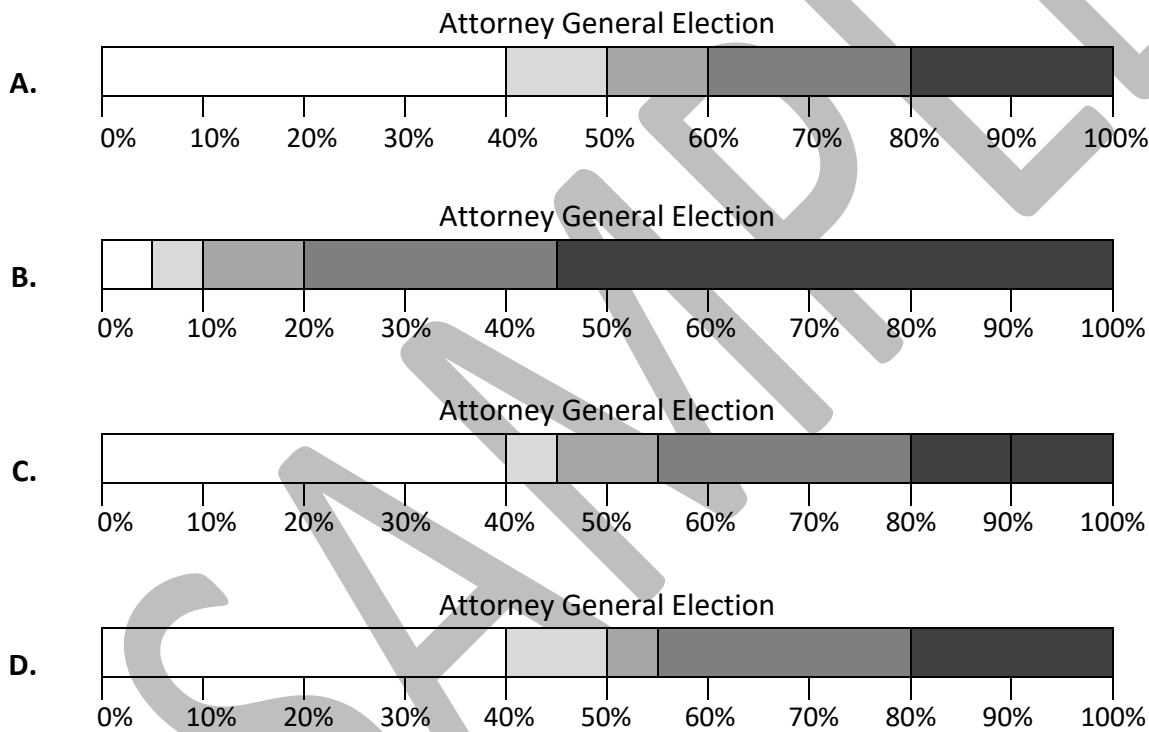


15. Five candidates ran for the office of Attorney General. The number of votes received by each candidate are shown in the table below.

**Attorney General Election**

Candidate	Number of Votes	Key for Bar Graph
Garza	4,800	
King	600	
Smith	1,200	
Castro	3,000	
Washington	2,400	

Which percentage bar graph best represents the data?



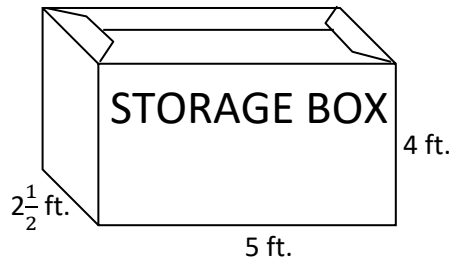
TEKS 6.12D

16. What is the prime factorization of 192?

- F.  $2^6 \cdot 3$
- G.  $2^5 \cdot 3^2$
- H.  $2^4 \cdot 3 \cdot 4$
- J.  $2 \cdot 3 \cdot 32$

TEKS 6.7A

9. For storage, Mr. Kim uses boxes like the one shown below.

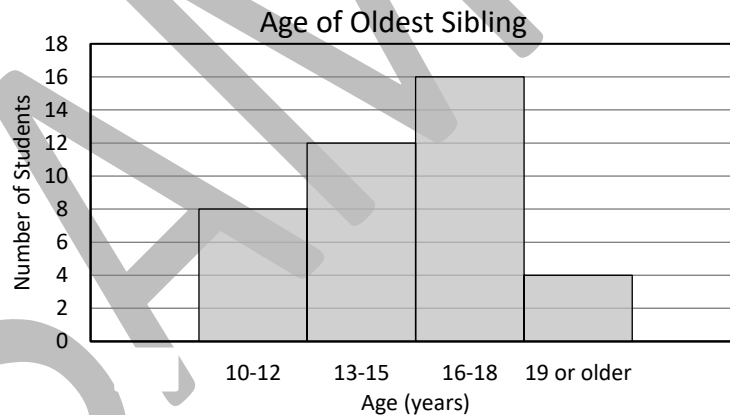


If Mr. Kim uses 2 of these boxes, what is the total volume for storage measured in cubic feet? Record your answer and fill in the bubbles. Be sure to use the correct place value.

					.		
+	0	0	0	0		0	0
-	1	1	1	1		1	1
	2	2	2	2		2	2
	3	3	3	3		3	3
	4	4	4	4		4	4
	5	5	5	5		5	5
	6	6	6	6		6	6
	7	7	7	7		7	7
	8	8	8	8		8	8
	9	9	9	9		9	9

TEKS 6.8D

10. Dora surveyed sixth grade students during lunch, and found that the oldest brother or sister in each family ranged between the ages of 10 and 24. She plotted the information in a histogram.



Based on this histogram, which of the following is **not** true?

- F. The number of siblings in the histogram aged 16-18 represent 0.40 of the survey results.
- G. The number of siblings in the histogram aged 10-12 represent 20% of the survey results.
- H. The number of students with siblings older than 15 years of age represent one-half of the surveyed population.
- J. The number of siblings in the histogram aged 13-15 represent 0.03 of the survey results.

TEKS 6.13A