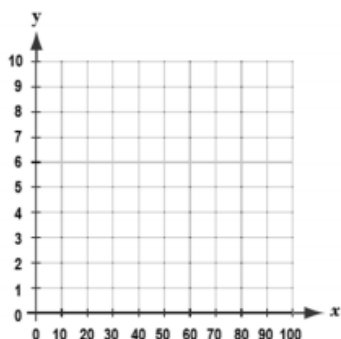


2019 FSA 6th Grade Review
Practice Test

A table of equivalent ratios is shown.

Ratios	
20	2
40	4
60	6
80	8

Use the Add Point tool to plot these points on the coordinate grid.



A paint mixture uses a specific blue to green ratio.

Complete the table using the ratio given.

Paint Mixture	
Blue Paint	Green Paint
2	5
4	
6	

An expression is shown.

$$\frac{4}{5} \div \frac{8}{7}$$

What is the value of the expression?

An expression is shown.

$$2\frac{1}{4} \div 1\frac{2}{5}$$

What is the value of the expression?

A rectangular plot of land has an area of $\frac{3}{2}$ square kilometers and a length of $\frac{3}{4}$ kilometer.

What is the width of the plot of land?

An expression is shown.

$$2925 \div 15$$

What is the value of the expression?

An expression is shown.

$$2312.2 + 3.4$$

What is the value of the expression?

What is the greatest common factor of 15 and 20?

What is the least common multiple of 7 and 12?

Which expression is equivalent to $8 + 20$?

- A. $4(4 + 20)$
- B. $4(2 + 5)$
- C. $2(2 + 10)$
- D. $2(6 + 18)$

An equation is shown.

$$30 + 12 = \square (5 + 2)$$

What factor is missing from the equation?

What is the opposite of -5 ?

2019 FSA 6th Grade Review

Practice Test

Chicago, Illinois has an elevation of 600 feet above sea level. The elevation of Desert Shores, California is -200 feet.

Select all the true statements.

- Desert Shores is above sea level.
- Desert Shores is at sea level.
- Desert Shores is below sea level.
- The difference in the elevations is less than 600 feet.
- The difference in the elevations is 600 feet.
- The difference in the elevations is more than 600 feet.

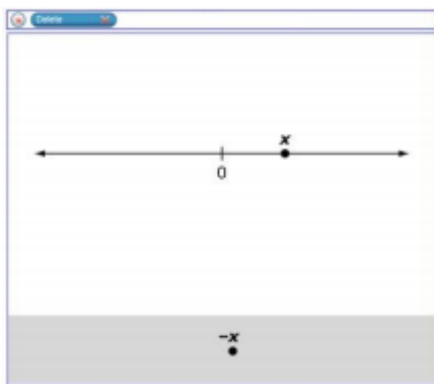
Desert Shores, California is located at an elevation that is below sea level. What is a possible elevation of Desert Shores, California?

- A. 600 feet
- B. 500 feet
- C. -200 feet
- D. 0 feet

What is the value of the x -coordinate that is 9 units to the left of $(5, -8)$?

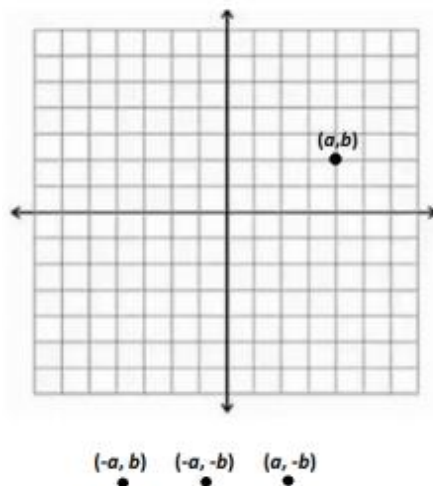
A value x is shown on the number line.

Drag the point to the number line to show the location of $-x$.



A point (a, b) is shown on the coordinate grid.

Drag the three points to their correct locations on the coordinate grid.

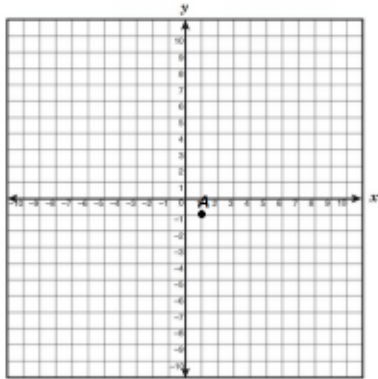


2019 FSA 6th Grade Review

Practice Test

Point A is shown on the coordinate grid.

Use the Add Point tool to plot four points that are all 7 units away from point A.



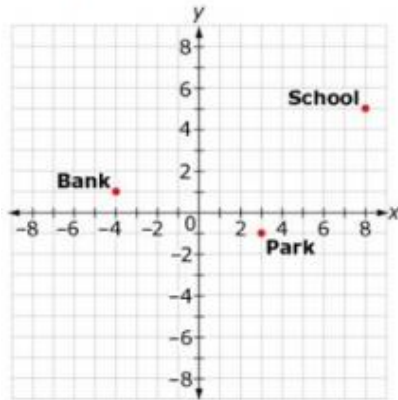
Order the numbers from least to greatest.

Least Greatest

--	--	--	--	--

$|-2.25|$ 3 $|2.5|$ -3 0

A map of a town is shown.



The town wants to build a new library that is 5 blocks away from the park and 6 blocks away from the school.

Use the Add Point tool to plot the location where the library should be built.

Which value is furthest from 0 on the number line?

- A. 20
- B. -21
- C. $|20.5|$
- D. $|-21.5|$

The elevations of several cities are shown.

Select which city has the greatest elevation and which city is farthest from sea level.

		Highest Elevation	Farthest from Sea Level
Chicago, IL	600 feet	<input type="checkbox"/>	<input type="checkbox"/>
Desert Shores, CA	-200 feet	<input type="checkbox"/>	<input type="checkbox"/>
Orlando, FL	80 feet	<input type="checkbox"/>	<input type="checkbox"/>

2019 FSA 6th Grade Review

Practice Test

Which value is equivalent to the expression 4^5 ?

- A. 9
- B. 20
- C. 625
- D. 1024

Which expression has a coefficient of 2?

- A. 3
- B. $2x^5$
- C. $4x^2$
- D. $\frac{3x}{2}$

Select all expressions that are equivalent to $8 \cdot 8 \cdot 8 \cdot 8 \cdot 8$.

- 8^5
- $8^1 \cdot 8^5$
- $8^2 \cdot 8^3$
- $(2^3)^5$
- $5(2^3)$

Jeffrey's brother Max is 5 years older than twice Jeffrey's age. Write an expression that represents the relationship of Max's age in terms of Jeffrey's age, j .

What is the surface area, in centimeters, of a cube with a side length, s , of $\frac{1}{3}$ cm?

Create an expression that is equivalent to $3x + 2x + x$, using the fewest terms.

Alyssa attends football games at her school. At each football game, she buys a bottle of water for \$0.75 and a candy bar for \$0.90.

Select all expressions that represent the amount of money, in dollars, Alyssa spends after attending 6 football games.

- $6(0.75)(0.90)$
- $6(0.75 + 0.90)$
- $6(0.75) + 6(0.90)$
- $6 + 0.75 + 0.90$
- $(6 + 0.75)(6 + 0.90)$

Which is an equivalent way to express $3y$?

- A. y^3
- B. $3 + y$
- C. $y + y + y$
- D. $y \cdot y \cdot y$

2019 FSA 6th Grade Review

Practice Test

An equation is shown.

$$x + 5 = 14$$

Which of the values can be substituted for x to make the equation true?

- A. 7
- B. 9
- C. 14
- D. 15

An equation is shown.

$$5x + 3x = 5x + \frac{15}{2}$$

What value of $3x$ makes the equation true?

An inequality is shown.

$$\frac{27}{7}n > \frac{4}{3}$$

Select all the values of n that make the inequality true.

- $\frac{2}{5}$
- $\frac{1}{3}$
- 1
- $\frac{2}{9}$
- $\frac{3}{2}$

Jason makes 30 dollars an hour. He spends 40 dollars a day on transportation and food. Write an expression to describe his spending and earnings for the day, where x is the number of hours that Jason works that day.

Write an expression to represent the sum of three consecutive integers, the smallest of which is n .

An equation is shown.

$$8x = 35$$

What is the value for x that makes the equation true?

2019 FSA 6th Grade Review

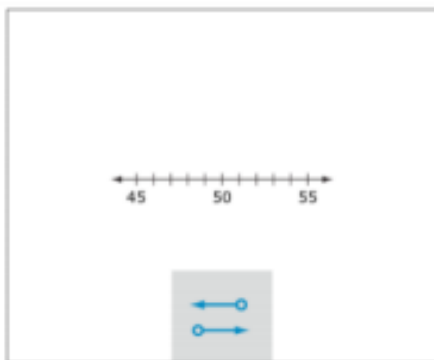
Practice Test

Suzie buys a salad for \$5.12 and is given \$14.88 as change.

Which equation represents the situation if x is the amount Suzie had before she bought the salad?

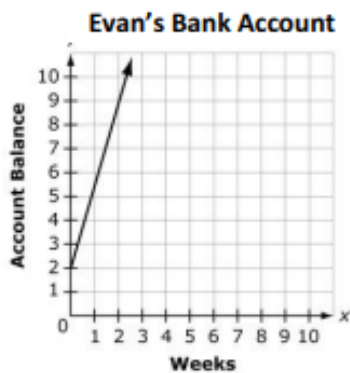
- A. $5.12x = 14.88$
- B. $x - 5.12 = 14.88$
- C. $14.88 - x = 5.12$
- D. $x + 5.12 = 14.88$

Graph the inequality $x < 50$.



An airport charges an additional fee for a piece of luggage that weighs more than 50 pounds. Write an inequality that shows the weight Michael's suitcase can be, x , without him having to pay the extra fee.

A graph of Evan's bank account is shown. What are the dependent and independent variables?

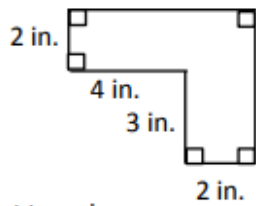


	Dependent	Independent
Weeks	<input type="checkbox"/>	<input type="checkbox"/>
Account Balance	<input type="checkbox"/>	<input type="checkbox"/>

2019 FSA 6th Grade Review

Practice Test

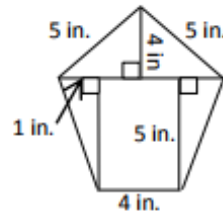
A shape is shown.



not to scale

What is the area, in square inches, of the shape?

A pentagon is shown.



not to scale

What is the area, in square inches, of the pentagon?

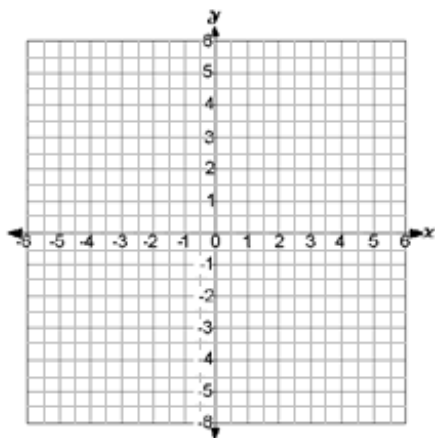
A right rectangular prism has a length of $4\frac{1}{2}$ feet, a width of $6\frac{1}{2}$ feet, and a height of 8 feet.

What is the volume of the prism?

A set of points is shown.

$(5, 1.5)$, $(0, 2.5)$, $(-1.5, -6)$, $(4, -3)$, $(-4.5, 1.5)$

Use the Connect Line tool to draw the polygon created by the points.



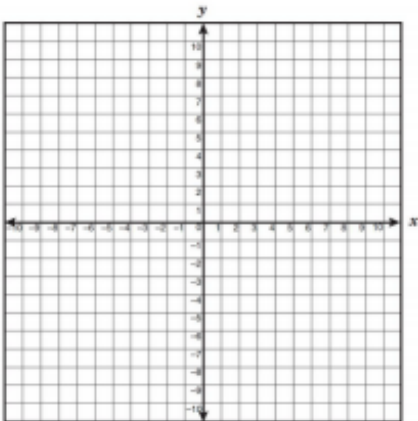
2019 FSA 6th Grade Review

Practice Test

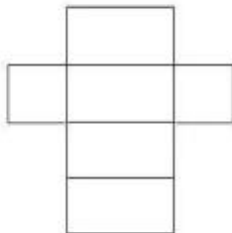
Konrad has drawn a triangle on a coordinate grid.

- One of the vertices is located at $(-1, -2)$.
- A second vertex has an x -coordinate of 7 and a positive y -coordinate.
- The area of the triangle is 20 square units.

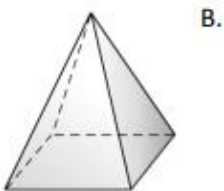
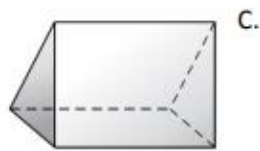
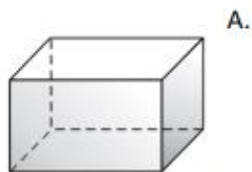
Use the Connect Line tool to draw a possible triangle that could be Konrad's.



A net is shown.



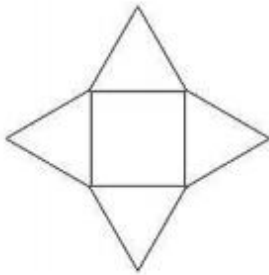
Which three-dimensional figure is represented by the net?



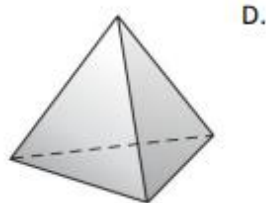
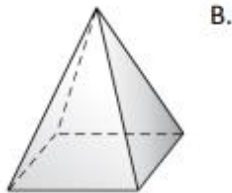
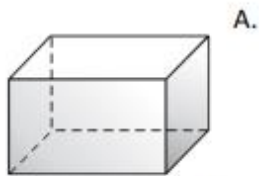
2019 FSA 6th Grade Review

Practice Test

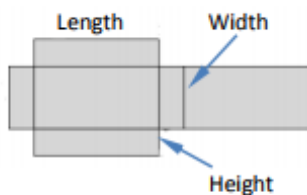
A net is shown.



Which three-dimensional figure is represented by the net?



The surface area of a rectangular prism is 115 square inches. The net of the prism is shown.



not to scale

What are possible dimensions of the prism?

- A. $2, 4, 6\frac{1}{2}$
- B. $2, 4, 8\frac{1}{4}$
- C. $3, 6, 6\frac{1}{2}$
- D. $3, 6, 8\frac{1}{4}$

Select all of the statistical questions.

- How many days are in the year?
- How many houses are in your town?
- What percent of Long Grove High School students like pizza?
- What is the average temperature in January?
- When does Matchell Bank open in the morning?

A data set is shown.

11, 13, 13, 13, 14, 14, 15, 15, 16, 16, 18

What is the mean of the data set?

Tim drives the Grand Avenue bus route. The total number of people who ride the bus each week for 5 weeks is shown in the data table.

Week	Number of people
1	16,325
2	18,140
3	17,362
4	16,697
5	16,786

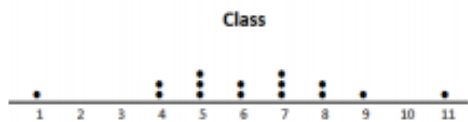
How many more people need to ride the bus in week 6 to increase the mean number of riders per week by 10?

A class is surveyed with data as shown.

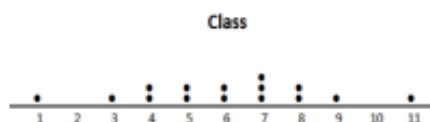
1, 4, 4, 5, 5, 5, 6, 6, 7, 7, 7, 8, 8, 9, 11

Which dot plot represents the class?

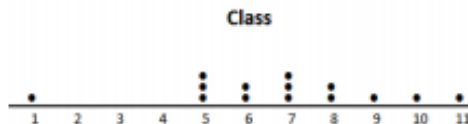
A.



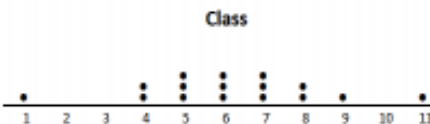
C.



B.



D.

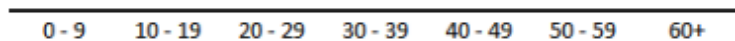


Robert asked each family member his or her age, to the nearest year, and recorded the data as shown.

1, 4, 11, 19, 21, 28, 36, 41, 61, 62

Click above the number line to create a dot plot that displays this data.

Age



2019 FSA 6th Grade Review

Practice Test

Robert asked each family member his or her age and recorded the data as shown.

1, 4, 11, 19, 21, 28, 36, 41, 61, 62

Click on the graph to create a histogram that displays these data.

Age

0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60+

Tim drives the Grand Avenue bus route. The total number of people who ride the bus each week for 5 weeks is shown in the data table.

Week	Number of people
1	16,325
2	18,140
3	17,362
4	16,697
5	16,786

What is the range of the number of people who ride the bus each week?

Alex found the mean number of food cans that were donated by students for the canned food drive at Epping Middle School. Alex's work is shown.

$$\frac{1 + 2 + 5 + 3 + 6 + 1 + 4 + 4 + 2 + 1 + 2 + 3 + 7 + 2 + 4 + 1}{16} = 3$$

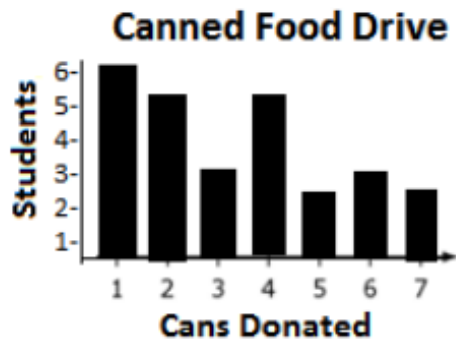
How many students donated food cans?

Tim drives the Grand Avenue bus route. The total number of people who ride the bus each week for 5 weeks is shown in the data table.

Week	Number of people
1	17,012
2	18,140
3	17,362
4	16,697
5	14,387

What is the interquartile range of the data?

A graph shows the number of cans students at Epping Middle School collected for a canned food drive.



Select all of the statements that describe the best measure of center to represent the data set.

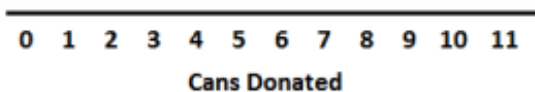
- Mode
- Mean
- Range
- Median
- Interquartile Range

A box plot shows the spread of the numbers of cans brought by students for a food drive.



Create a possible line plot, given that 25 students donated cans, using the values from the box plot.

Canned Food Drive



Jordan has 3 blue marbles and 8 red marbles.

What is the ratio of blue marbles to red marbles?

- A. 3:3
- B. 3:5
- C. 3:8
- D. 3:11

Jordan has a jar of blue, red, and yellow marbles, as shown.



Complete the table to show the ratio of blue marbles to yellow marbles.

Ratio of Blue to Yellow		
	to	

Which statement describes a unit rate?

- A. Sara ate 1 cookie.
- B. Sara is driving 16 miles.
- C. Sara is driving 30 miles per 1 hour.
- D. Sara ate 3 crackers and 1 apple.

A jar of marbles is shown.



Complete the table to show the ratios.

Ratios of Marbles		
Red: Green		
Blue: Total Marbles		

Tom knows that in his school 10 out of every 85 students are left-handed. There are 391 students in Tom's school.

How many students in Tom's school are left-handed?

The standard length of film on a film reel is 300 meters. On the first day of shooting a movie, a director uses 30% of the film on one reel. How long is the strip of film that was used?