



Grade 6

FAST Mathematics

Sample Items

Answer Key

The Grade 6 FAST Mathematics Sample Items Answer Key provides the correct response(s) for each item on the sample test. The sample items and answers are not intended to demonstrate the length of the actual test, nor should student responses be used as an indicator of student performance on the actual test.

All trademarks and trade names found in this publication are the property of their respective owners and are not associated with the publishers of this publication.

BLANK PAGE

FAST Mathematics Sample Items Answer Key

1. Mr. Balboa gives a survey to a sample of students at Wilson Middle School.

Select all the questions that Mr. Balboa can ask that will generate numerical data with variation.

How many letters are in the English alphabet?

What is the total number of fluid ounces in one gallon?

How many classrooms does Wilson Middle School have?

What is the greatest number of pencils a student at Wilson Middle School has?

What is the average number of books read by each of Ms. Garcia's classes over the summer?

Option D: This answer is correct. The student correctly determined that data with variation needs to be collected to answer this question.

Option E: This answer is correct. The student correctly determined that data with variation needs to be collected to answer this question.

FAST Mathematics Sample Items Answer Key

2. An expression is shown.

$$(22.4)(2.65)$$

What is the value of the expression?

59.36				
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

Other correct responses: any equivalent value

FAST Mathematics Sample Items Answer Key

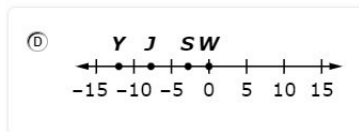
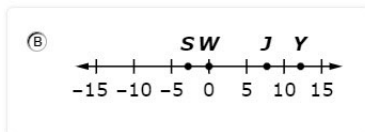
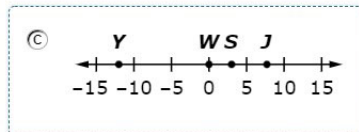
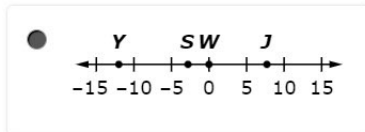
- 3.** This question has **two** parts.

The temperatures, in degrees Celsius ($^{\circ}\text{C}$), above or below the freezing point of water (W) for three products are shown.

Product	Temperature Above or Below the Freezing Point of Water (W)
Frozen yogurt (Y)	12°C below
Orange juice (J)	8°C above
Slushies (S)	3°C below

Part A

Which number line represents the temperatures, in degrees Celsius, for the frozen yogurt (Y), orange juice (J), and slushies (S) and the freezing point of water (W)?



Part B

Select all the statements that correctly compare the temperatures for serving frozen yogurt, orange juice, and slushies.

- Frozen yogurt is served at a colder temperature than orange juice.
- Orange juice is served at a colder temperature than frozen yogurt.
- Frozen yogurt is served at a warmer temperature than slushies.
- Orange juice is served at a warmer temperature than slushies.
- Slushies are served at a warmer temperature than frozen yogurt.

FAST Mathematics Sample Items Answer Key

Part A

Option A: **This answer is correct.** The student correctly plotted the values on the number line.

Part B

Option A: **This answer is correct.** The student correctly compared the temperatures for serving frozen yogurt and orange juice.

Option D: **This answer is correct.** The student correctly compared the temperatures for serving orange juice and slushies.

Option E: **This answer is correct.** The student correctly compared the temperatures for serving slushies and frozen yogurt.

FAST Mathematics Sample Items Answer Key

4. On Monday, $\frac{5}{8}$ inch of rain fell in $\frac{2}{3}$ hour.

Which value represents the unit rate, in inches per hour?

A $\frac{5}{12}$

B $\frac{15}{16}$

C $\frac{16}{15}$

D $\frac{31}{24}$

Option B: This answer is correct. The student correctly evaluated the unit rate in inches per hour.

FAST Mathematics Sample Items Answer Key

5. Evaluate the expression $c + 3\left(\frac{c}{d}\right) \cdot d$, where $c = -4$ and $d = 2$.

-16				
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		


Other correct responses: any equivalent value


FAST Mathematics Sample Items Answer Key


- 6.** Ms. Becker records the number of times each student in her class has visited the Science Museum. Based on the responses, she calculates the mean, median, and range of the data set.

Ms. Becker's entire class then goes on a field trip to the Science Museum. She updates the data set to include the field trip to the Science Museum.

Select words or phrases to complete the statements to describe the impact of the changes.

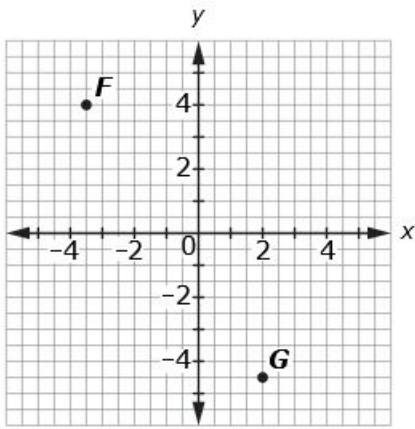
The mean of the data set 

The median of the data set 

The range of the data set 

FAST Mathematics Sample Items Answer Key

7. Two points are shown on the coordinate plane.



Match each point with its coordinates.

	$(2, -4\frac{1}{2})$	$(3\frac{1}{2}, 4)$	$(-3\frac{1}{2}, 4)$	$(-4\frac{1}{2}, 2)$
point F	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
point G	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FAST Mathematics Sample Items Answer Key

8. Kate has $\frac{3}{4}$ ounce of lip balm. She makes $1\frac{1}{2}$ more ounces of lip balm. She measures $\frac{1}{2}$ -ounce portions of lip balm and places the portions in individual containers.

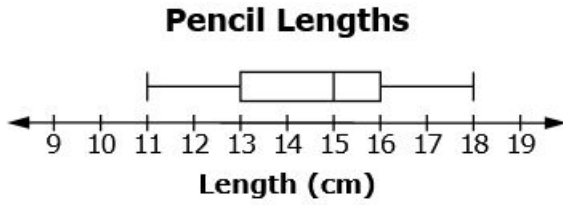
Complete the statement to describe how many containers Kate will use and whether she will have any lip balm remaining.

Kate will use containers, each holding $\frac{1}{2}$ ounce of lip balm.

She lip balm remaining.

FAST Mathematics Sample Items Answer Key

9. The students in a math class measure their pencils to the nearest centimeter (cm) and create the box plot shown.



This question has **two** parts.

Part A

What is the length, in centimeters, of the shortest pencil in the class?

←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

Part B

What is the length, in centimeters, of the longest pencil in the class?

←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

Other correct responses: any equivalent value

FAST Mathematics Sample Items Answer Key

10. Select all the values that are equivalent to 4.175.

$4\frac{1}{8}$

$4\frac{7}{40}$

$\frac{167}{4}$

$\frac{33}{8}$

41.75%

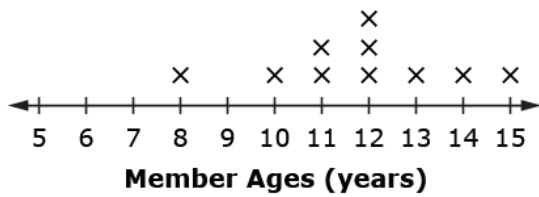
417.5%

Option B: This answer is correct. The student determined (or rewrote) a mixed number that is equivalent to 4.175.

Option F: This answer is correct. The student divided the percent by 100 to determine an equivalent decimal.

FAST Mathematics Sample Items Answer Key

- 11.** The line plot shows the ages, in years, of the members in a chess club.



Complete the sentence to describe the data set.

The data set has a range of , and the data clusters .

Other correct responses: any value equivalent to 7

FAST Mathematics Sample Items Answer Key

- 12.** Ron has 2500 pounds of sod to deliver. He wants to deliver an equal amount of sod on each of 4 trips.

Write an equation for s , the amount of sod that Ron should deliver on each trip.

Then, solve the equation for s .

Equation:

$s =$

←	→	↶	↷	✖		
1	2	3	s			
4	5	6	+	-	•	÷
7	8	9	<	=	>	
	0		\square^{\square}	()		
.	-	$\frac{\square}{\square}$				

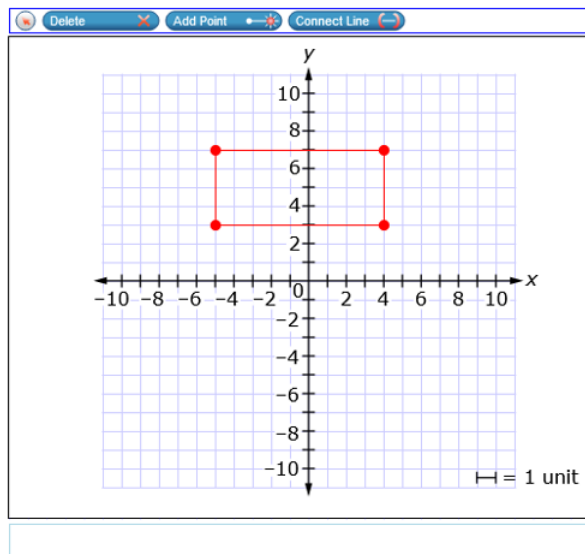
Other correct responses: any equivalent equation and value

FAST Mathematics Sample Items Answer Key

13. A coordinate plane is shown.

Use the Connect Line tool to draw a rectangle that satisfies these conditions:

- It has an area of 36 square units.
- It has a perimeter greater than 25 units.
- It has one vertex at $(-5, 7)$.



Other correct responses: any rectangle with an area of 36 square units, a perimeter greater than 25 units, and a vertex at $(-5, 7)$

FAST Mathematics Sample Items Answer Key

14. This question has **two** parts.

An expression is shown, where $x = 2$, $y = 1$, and $z = 4$.

$$3x^2 - \frac{3}{y} + 3z$$

Part A

Some of Kim's work to evaluate the expression is shown. Step 2 of her work is incorrect.

Click on the incorrect number(s) in Step 2 of Kim's work.

Given	$3x^2 - \frac{3}{y} + 3z$
Step 1	$3(2)^2 - \frac{3}{(1)} + 3(4)$
Step 2	36 - 3 + 7

Part B

What is the correct value of the expression $3x^2 - \frac{3}{y} + 3z$ when $x = 2$, $y = 1$, and $z = 4$?

21

←
→
↶
↷
✖
☑

1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

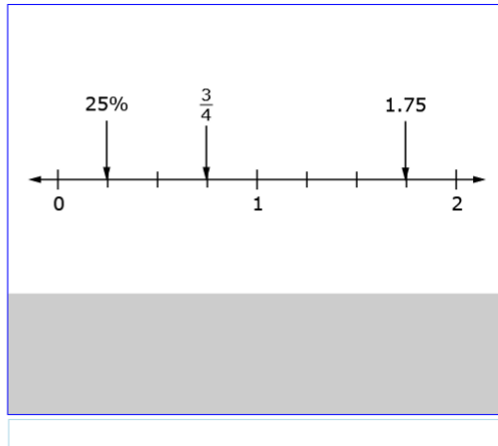
Other correct responses: for Part B, any equivalent value

FAST Mathematics Sample Items Answer Key

15. Three values are shown.

25%, 1.75, $\frac{3}{4}$

Drag the values to their locations
on the number line.

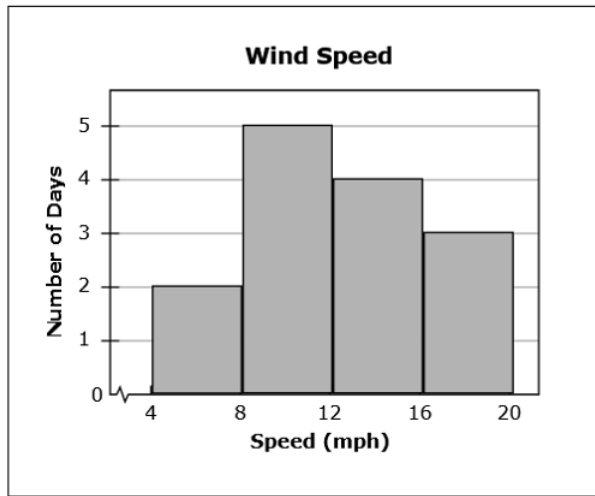


FAST Mathematics Sample Items Answer Key

- 16.** A meteorologist records the wind speed, in miles per hour (mph), for 14 days, as shown.

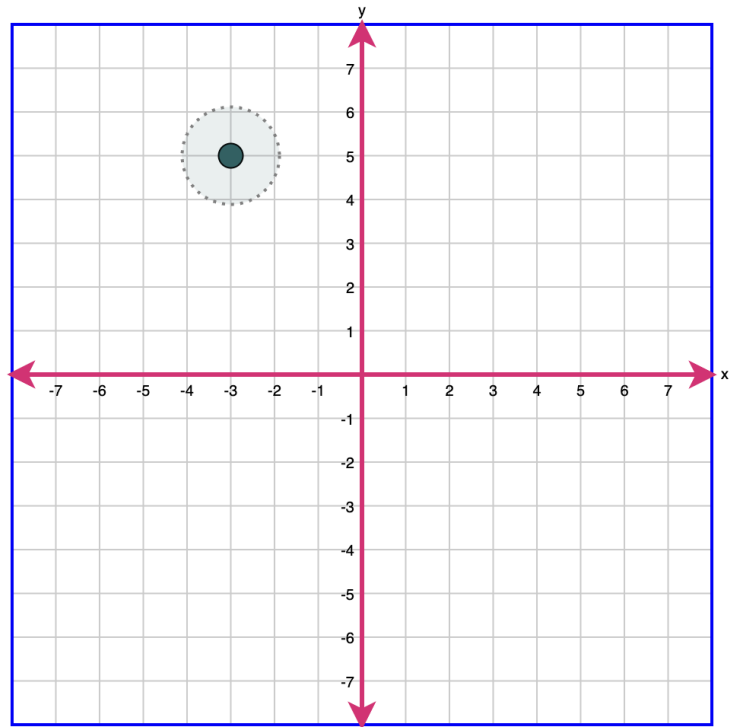
17, 14, 5, 10, 17, 17, 11, 5, 13,
10, 10, 11, 13, 14

Click on the graph to create a histogram of the data.



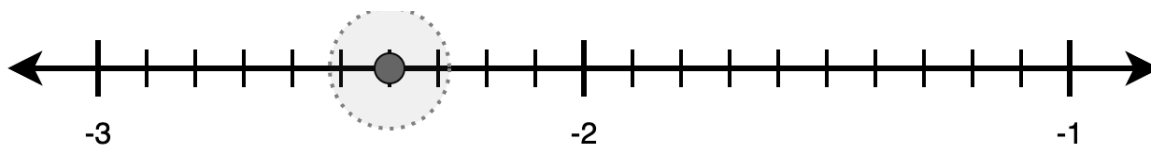
FAST Mathematics Sample Items Answer Key

17. Plot $(-3, 5)$ on the coordinate grid.



FAST Mathematics Sample Items Answer Key

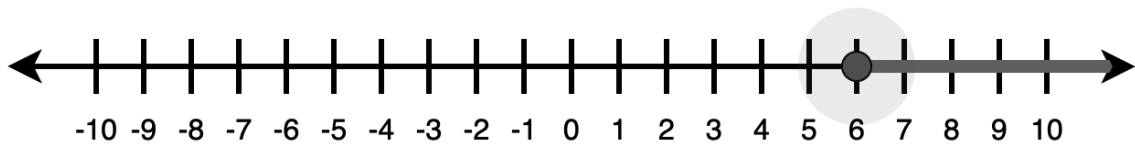
18. Click on the number line to plot a point at $-2\frac{2}{5}$.



FAST Mathematics Sample Items Answer Key

- 19.** Matty plays a video game in which he can gain or lose points. He needs to get at least 6 points to complete a level.

Create a graph of an inequality on the number line to represent the number of points Matty needs to get to complete the level.

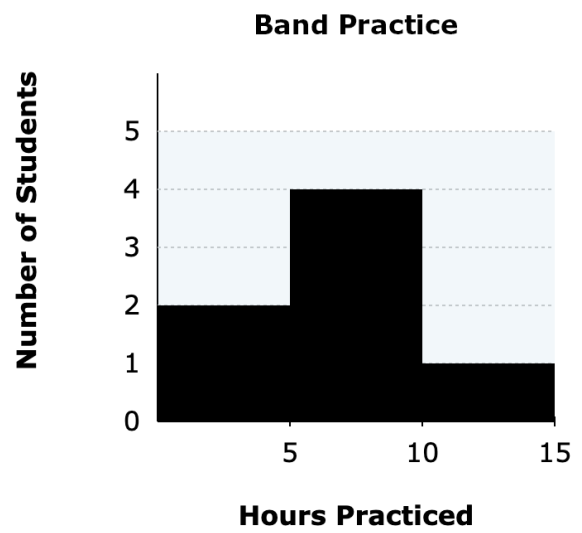


FAST Mathematics Sample Items Answer Key

- 20.** A band teacher surveys some students on how many hours they practiced their instruments last week. Her data are shown.

{2, 4, 6, 7, 7, 7, 11}

Create a histogram to represent the data.



BLANK PAGE



Office of Assessment
Florida Department of Education, Tallahassee, Florida
Copyright © 2026 State of Florida, Department of State