



Grade 6

FAST Mathematics

Sample Test Materials

Answer Key

The Grade 6 FAST Mathematics Sample Test Materials 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?

Write your response in the shaded box below.

59.36

Other correct responses: any equivalent value

FAST Mathematics Sample Items Answer Key

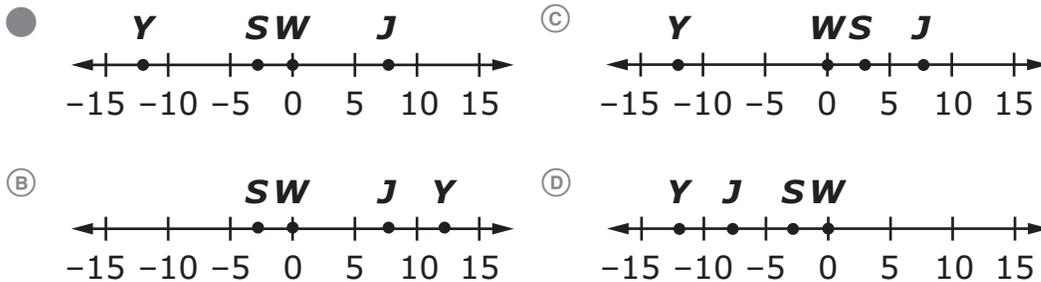
3. This question has **two** parts.

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 $d = 2$.

Write your response in the shaded box below.

-16

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. For each box, fill in the bubble before the word or phrase that is correct.

The mean of the data set

<input checked="" type="radio"/> increases
<input type="radio"/> decreases
<input type="radio"/> stays the same

.

The median of the data set

<input checked="" type="radio"/> increases
<input type="radio"/> decreases
<input type="radio"/> stays the same

.

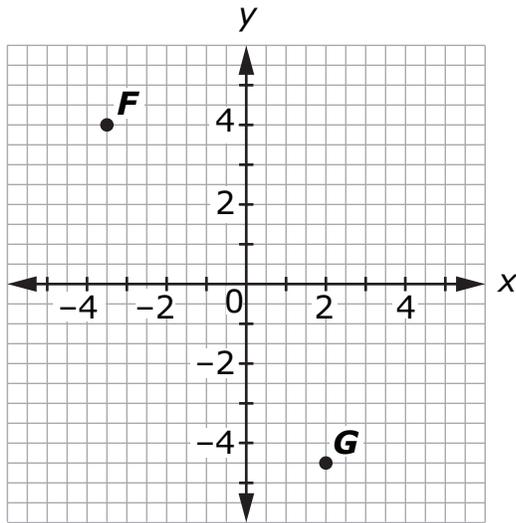
The range of the data set

<input type="radio"/> increases
<input type="radio"/> decreases
<input checked="" type="radio"/> stays the same

.

FAST Mathematics Sample Items Answer Key

7. Two points are shown on the coordinate plane.



Fill in bubbles to 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 <i>F</i>	<input type="radio"/> (A)	<input type="radio"/> (B)	<input checked="" type="radio"/>	<input type="radio"/> (D)
point <i>G</i>	<input checked="" type="radio"/>	<input type="radio"/> (F)	<input type="radio"/> (G)	<input type="radio"/> (H)

FAST Mathematics Sample Items Answer Key

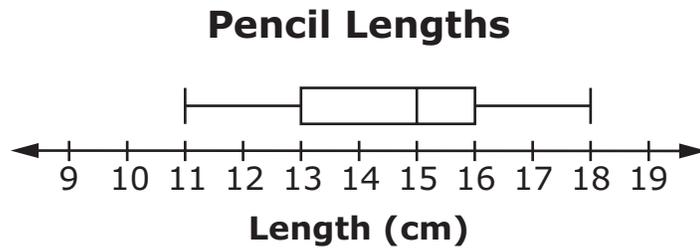
8. Kate has $\frac{3}{4}$ ounce of lip balm. She makes $1\frac{1}{2}$ more ounces of lip balm.

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. For each blank, fill in the bubble **before** the number or phrase that is correct.

Kate will use _____ [A 2 4 C 5 D 9] containers, each holding $\frac{1}{2}$ ounce of lip balm. She _____ [will have B will not have any] lip balm remaining.

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?

Write your response in the shaded box below.

11

Part B

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

Write your response in the shaded box below.

18

Other correct responses: any equivalent value

FAST Mathematics Sample Items Answer Key

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

(A) $4\frac{1}{8}$

(B) $4\frac{7}{40}$

(C) $\frac{167}{4}$

(D) $\frac{33}{8}$

(E) 41.75%

(F) 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.

BLANK PAGE



Office of Assessment
Florida Department of Education, Tallahassee, Florida
Copyright © 2023 State of Florida, Department of State