FLORIDA DEPARTMENT OF EDUCATION
fldoe.org

Test Release Support Document

2024

Grade 3 Mathematics and Reading
Grade 6 Mathematics and Reading
Grade 8 Science
Grade 10 Reading
Algebra 1 and Civics EOCs
Writing Prompts

Introduction

Section 1008.22(8), Florida Statutes (F.S.), requires the Department to publish each statewide, standardized assessment administered, excluding retakes, at least once on a triennial basis, with the initial publication occurring after the Spring 2024 test administration. The initial publication of assessments must include, at a minimum, the grade 3 Mathematics and English Language Arts (ELA) Reading assessments, the grade 10 ELA Reading assessment and the Algebra 1 End-of-Course (EOC) Assessment. Per statute, released content must have appeared on tests in the administration year immediately preceding release. Based on those requirements, below is a proposed timeline for the release of operational tests beginning with the 2023–24 school year.

June 2024	June 2025	June 2026
Grade 3 Mathematics & ELA Reading	Grade 5 Mathematics & ELA Reading	Grade 4 Mathematics & ELA Reading
Grade 6 Mathematics & ELA Reading	Grade 8 Mathematics & ELA Reading	Grade 7 Mathematics & ELA Reading
Grade 8 Science	Grade 5 Science	Biology 1 EOC
Grade 10 ELA Reading	Grade 9 ELA Reading	
Algebra 1 EOC	Geometry EOC	
Civics EOC	U.S. History EOC	
Annually: Grades 4–10 Writing prompts and individual student responses		

The purpose of the released tests is to promote transparency in the statewide, standardized assessment program and to increase the comfort level of students and parents with the state assessments. Students, parents, and teachers should use the released tests to better understand the types of items on Florida's K–12 statewide assessments.

Each released test will include content that represents an operational test blueprint for each respective assessment. The released tests can also be used to illustrate the length of an operational test and the difficulty of the questions on that test.

Each released test will include an answer key, the percentage of students that answered that item correctly, the reporting category that the item fits in, and the item benchmark information.

For more information about K–12 assessments, please visit https://www.fldoe.org/accountability/assessments/k-12-student-assessment/.

For questions related to this document or released tests in general, please contact Assessment@fldoe.org.

Grade 6 FAST Mathematics

Test Release: 2024

1. Jackson has a weekly reading goal. He needs to read for at least 2 hours to meet his goal this week.

Which inequality models r, the number of hours Jackson needs to spend reading this week?

Ⓐ $r < 2$

Ⓑ $r > 2$

Ⓒ $r \leq 2$

Ⓓ $r \geq 2$

Answer Key: D

Percentage of Students Answering Correctly: 36%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.1.2

Benchmark Description: Translate a real-world written description into an algebraic inequality in the form of x > a, x < a, x >= a or x <= a. Represent the inequality on a number line.

2. The number 84 is 35% of what number?

Ⓐ 2.4

Ⓑ 29.4

Ⓒ 240

Ⓓ 2940

Answer Key: C

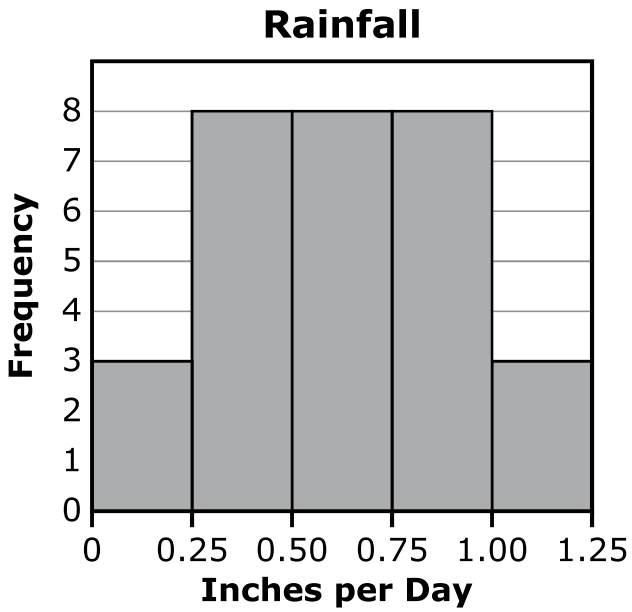
Percentage of Students Answering Correctly: 42%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.3.4

Benchmark Description: Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities.

3. The histogram shows the inches of rainfall per day in a town for one month.



Which sentence describes the distribution?

Ⓐ The distribution has a gap.

Ⓑ The distribution is skewed.

Ⓒ The distribution is symmetric.

Ⓓ The distribution contains an outlier.

Answer Key: C

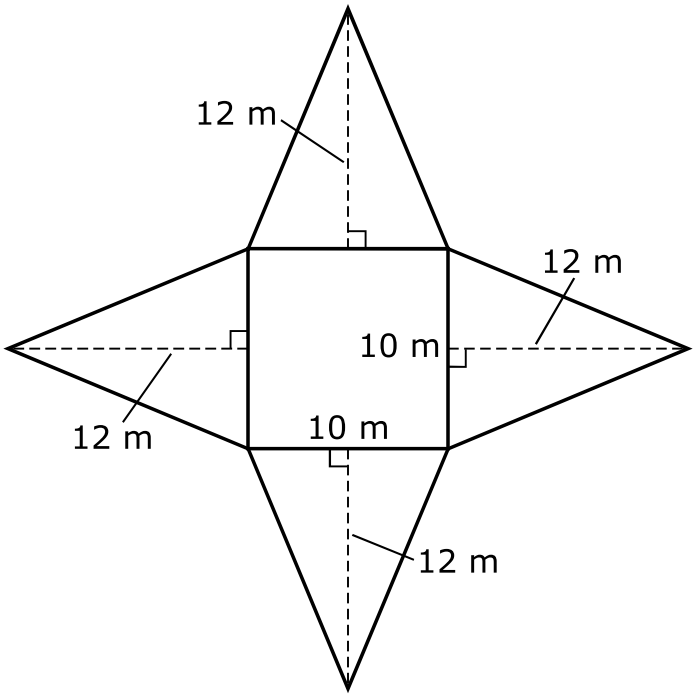
Percentage of Students Answering Correctly: 57%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

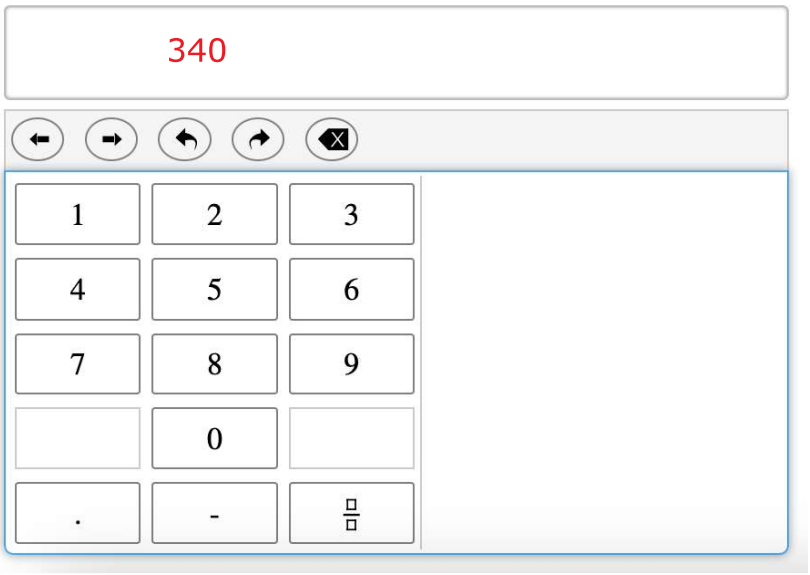
Benchmark: MA.6.DP.1.4

Benchmark Description: Given a histogram or line plot within a real-world context, qualitatively describe and interpret the spread and distribution of the data, including any symmetry, skewness, gaps, clusters, outliers and the range.

4. The net of a square pyramid is shown, with dimensions in meters (m).



What is the surface area, in square meters, of the pyramid?



Answer Key: 340, or any equivalent value

Percentage of Students Answering Correctly: 22%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.2.4

Benchmark Description: Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net.

5. Select all the expressions that have a value of 18.

Ⓐ $14 - |4|$

Ⓑ $|16| + |-2|$

Ⓒ $|6| + |-24|$

Ⓓ $|20| - |-2|$

Ⓔ $|-27| + |9|$

Answer Key: B, D

Percentage of Students Answering Correctly: 49%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.1.4

Benchmark Description: Solve mathematical and real-world problems involving absolute value, including the comparison of absolute value.

6. On a baseball team, 7 players are in sixth grade and 10 players are in seventh grade.

What is the ratio of the number of players in sixth grade to the total number of players?

Ⓐ 7:3

Ⓑ 7:10

Ⓒ 7:17

Ⓓ 10:17

Answer Key: C

Percentage of Students Answering Correctly: 48%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.3.1

Benchmark Description: Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation: a/b, a to b, or a:b where b <> 0.

7. What is the value of −133 − 42?

Answer Key: −175, or any equivalent value

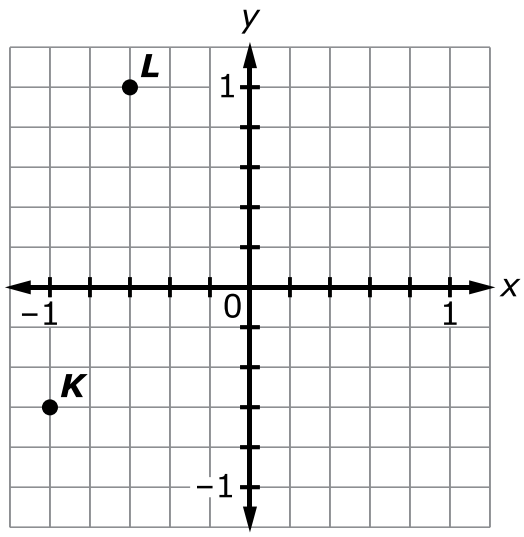
Percentage of Students Answering Correctly: 62%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.4.1

Benchmark Description: Apply and extend previous understandings of operations with whole numbers to add and subtract integers with procedural fluency.

8. Points *L* and *K* are shown on the coordinate plane.



Match each point with its coordinates.

	(1, −0.6)	**(−0.6, 1)**	**(−0.6, −1)**	**(−1, −0.6)**
Point *K*	Ⓐ	Ⓑ	Ⓒ	Ⓓ
Point *L*	Ⓔ	Ⓕ	Ⓖ	Ⓗ

Answer Key: D, F

Percentage of Students Answering Correctly: 35%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.1.1

Benchmark Description: Extend previous understanding of the coordinate plane to plot rational number ordered pairs in all four quadrants and on both axes. Identify the x- or y-axis as the line of reflection when two ordered pairs have an opposite x- or y- coordinate.

9. Richard uploads $\frac{1}{6}$ of his photo library to a file sharing site in $\frac{1}{2}$ minute.

If the upload continues at the same constant rate, what fraction of Richard's photo library can he upload per minute to the file sharing site?

Ⓐ $\frac{1}{180}$

Ⓑ $\frac{1}{12}$

Ⓒ $\frac{1}{3}$

Ⓓ 3

Answer Key: C

Percentage of Students Answering Correctly: 40%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.3.2

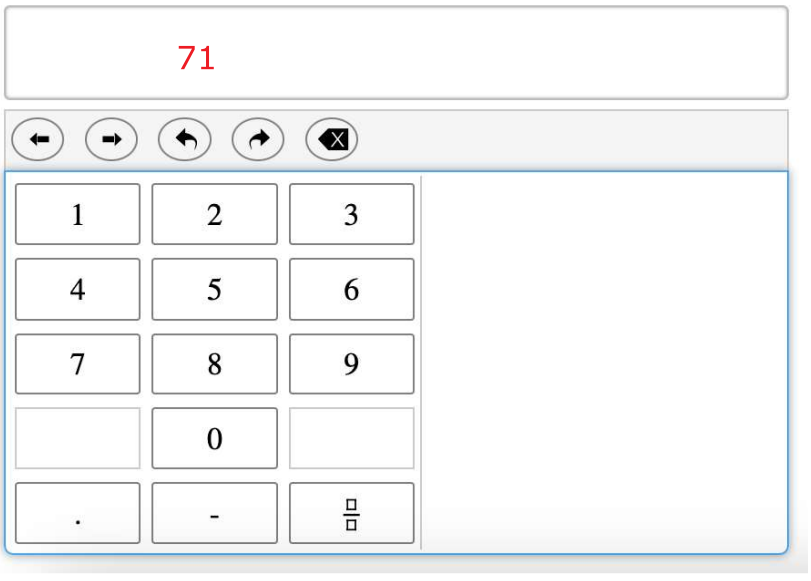
Benchmark Description: Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate.

10. Aisha records the outdoor temperature, in degrees Fahrenheit (°F), each day for 5 days in the table shown.

Outdoor Temperature

Day	Temperature (°F)
Monday	76.5
Tuesday	70.2
Wednesday	63.0
Thursday	71.9
Friday	73.4

What is the mean temperature of Aisha's data?



Answer Key: 71, or any equivalent value

Percentage of Students Answering Correctly: 34%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.DP.1.2

Benchmark Description: Given a numerical data set within a real-world context, find and interpret mean, median, mode and range.

11. What is the value of 1^3?

Ⓐ 1

Ⓑ 3

Ⓒ 111

Ⓓ 1000

Answer Key: A

Percentage of Students Answering Correctly: 69%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.3.3

Benchmark Description: Evaluate positive rational numbers and integers with natural number exponents.

12. What is the value of the product of 3.42 and 0.11?

Ⓐ 0.0342

Ⓑ 0.03762

Ⓒ 0.342

Ⓓ 0.3762

Answer Key: D

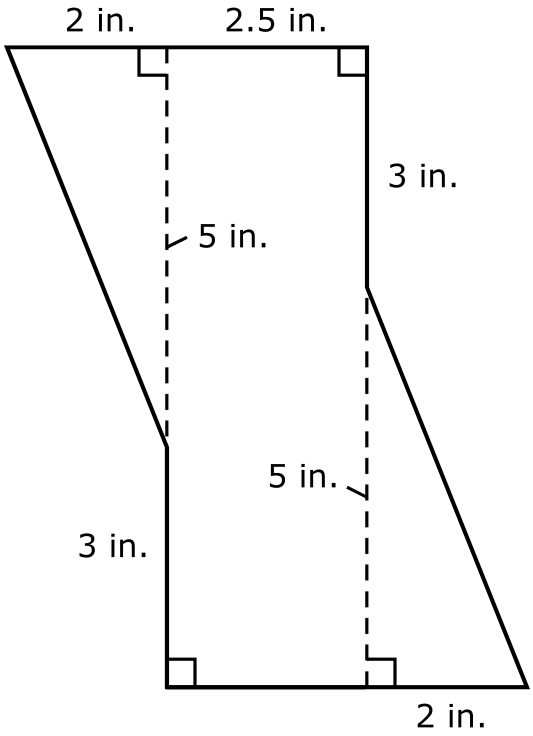
Percentage of Students Answering Correctly: 54%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.2.1

Benchmark Description: Multiply and divide positive multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency.

13. A figure is shown, with dimensions in inches (in.).



What is the area of the figure?

Ⓐ 25 square inches
Ⓑ 30 square inches
Ⓒ 36 square inches
Ⓓ 40 square inches

Answer Key: B

Percentage of Students Answering Correctly: 33%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.2.2

Benchmark Description: Solve mathematical and real-world problems involving the area of quadrilaterals and composite figures by decomposing them into triangles or rectangles.

14. Select all the values for j that make $j + 2 < 17$ true.

Ⓐ −15
Ⓑ −10
Ⓒ 0
Ⓓ 15
Ⓔ 17
Ⓕ 20

Answer Key: A, B, C

Percentage of Students Answering Correctly: 55%

Reporting Category: Algebraic Reasoning

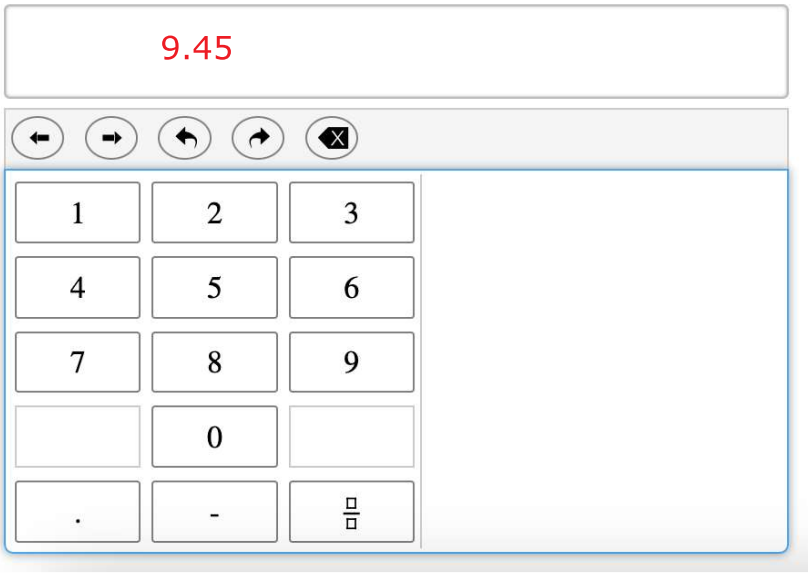
Benchmark: MA.6.AR.2.1

Benchmark Description: Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false.

15. Malia has 2 bags of oranges and 1 bag of grapefruit.

- The first bag of oranges weighs 1.4 pounds, and the second bag weighs 2.8 pounds.
- The bag of grapefruit weighs 2.25 times as much as the two bags of oranges combined.

What is the weight, in pounds, of the bag of grapefruit?



Answer Key: 9.45, or any equivalent value

Percentage of Students Answering Correctly: 46%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.2.3

Benchmark Description: Solve multi-step real-world problems involving any of the four operations with positive multi-digit decimals or positive fractions, including mixed numbers.

16. Claudia buys a 240-page book. She will read 20 pages of the book every week.

Which expression represents how many pages Claudia has left to read after w weeks?

Ⓐ $240 - 20w$

Ⓑ $240w - 20$

Ⓒ $240 + 20w$

Ⓓ $240w + 20$

Answer Key: A

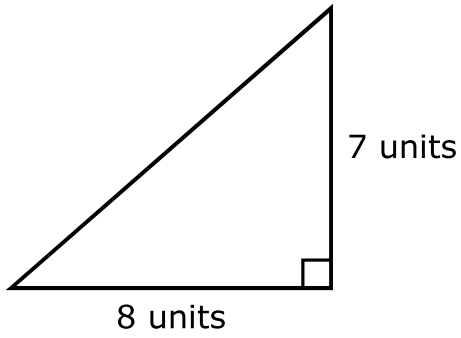
Percentage of Students Answering Correctly: 72%

Reporting Category: Algebraic Reasoning

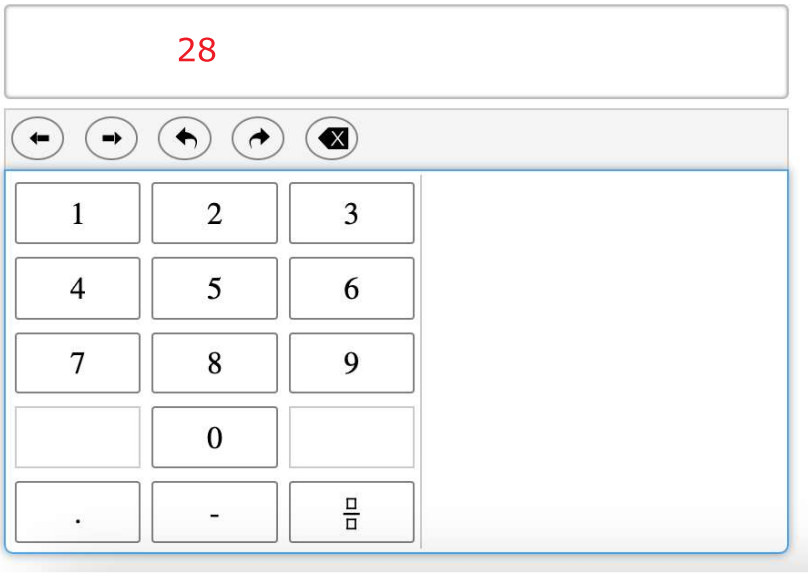
Benchmark: MA.6.AR.1.1

Benchmark Description: Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.

17. A right triangle is shown.



What is the area, in square units, of the triangle?



Answer Key: 28, or any equivalent value

Percentage of Students Answering Correctly: 35%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.2.1

Benchmark Description: Derive a formula for the area of a right triangle using a rectangle. Apply a formula to find the area of a triangle.

18. Which decimal is equivalent to $3\frac{4}{5}$

Ⓐ 0.345

Ⓑ 0.38

Ⓒ 3.45

Ⓓ 3.8

Answer Key: D

Percentage of Students Answering Correctly: 45%

Reporting Category: Number Sense and Operations

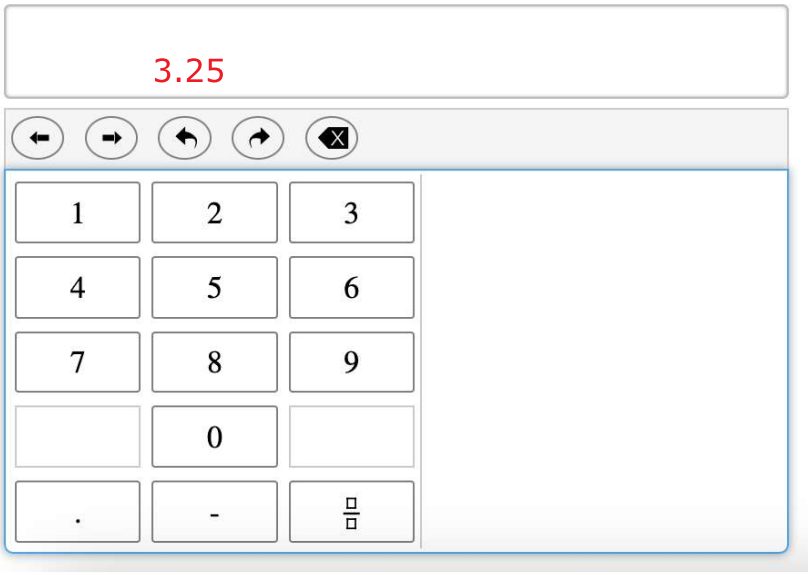
Benchmark: MA.6.NSO.3.5

Benchmark Description: Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages.

19. An equation is shown.

$$2.75 = m - 0.5$$

What is the value of m in the equation?



Answer Key: 3.25, or any equivalent value

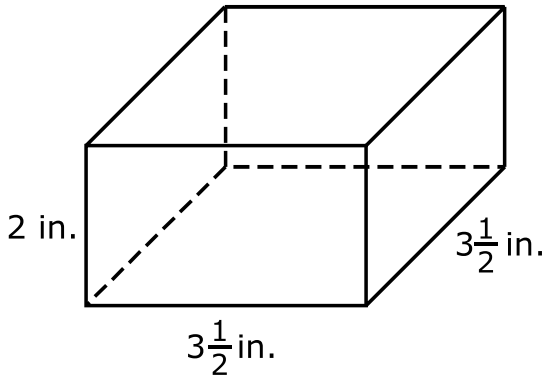
Percentage of Students Answering Correctly: 44%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.2.4

Benchmark Description: Determine the unknown decimal or fraction in an equation involving any of the four operations, relating three numbers, with the unknown in any position.

20. A package in the shape of a right rectangular prism is shown, with units in inches (in.).



What is the volume, in cubic inches, of the package?

Ⓐ 9

Ⓑ $12\frac{1}{4}$

Ⓒ $18\frac{1}{4}$

Ⓓ $24\frac{1}{2}$

Answer Key: D

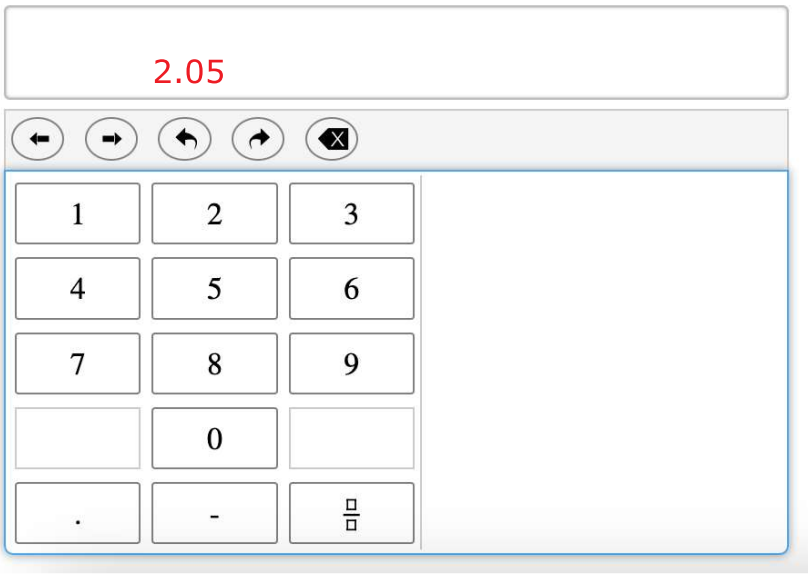
Percentage of Students Answering Correctly: 38%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.2.3

Benchmark Description: Solve mathematical and real-world problems involving the volume of right rectangular prisms with positive rational number edge lengths using a visual model and a formula.

21. What is $\frac{41}{20}$ written as a decimal?



Answer Key: 2.05, any equivalent decimal value

Percentage of Students Answering Correctly: 47%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.3.5

Benchmark Description: Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages.

22. Marquis can plant 25 flowers in 10 minutes.

Which ratio can be used to evaluate the unit rate, in flowers per minute?

Ⓐ $\frac{25}{10}$

Ⓑ $\frac{10}{25}$

Ⓒ $\frac{10}{35}$

Ⓓ $\frac{25}{35}$

Answer Key: A

Percentage of Students Answering Correctly: 74%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.3.2

Benchmark Description: Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate.

23. An equation is shown.

$$\frac{5}{12} + x = \frac{11}{12}$$

What is the value of x?

Ⓐ $\frac{6}{12}$

Ⓑ $\frac{7}{12}$

Ⓒ $\frac{16}{24}$

Ⓓ $1\frac{4}{12}$

Answer Key: A

Percentage of Students Answering Correctly: 86%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.2.4

Benchmark Description: Determine the unknown decimal or fraction in an equation involving any of the four operations, relating three numbers, with the unknown in any position.

24. A farmer measures the heights, in inches, of randomly selected corn stalks. His data are shown.

{38, 44, 35, 38, 41, 33}

He measures another corn stalk that increases the range of his data set by exactly 8 inches.

What is a possible height for the corn stalk, in inches, that increases the range by 8 inches?

Answer Key: 25 or 52, or any equivalent values

Percentage of Students Answering Correctly: 28%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.DP.1.6

Benchmark Description: Given a real-world scenario, determine and describe how changes in data values impact measures of center and variation.

25. Which set of values is in order from least to greatest?

Ⓐ –13.4, –17.2, 11.03, 11.7

Ⓑ –17.2, –13.4, 11.03, 11.7

Ⓒ –13.4, –17.2, 11.7, 11.03

Ⓓ –17.2, –13.4, 11.7, 11.03

Answer Key: B

Percentage of Students Answering Correctly: 62%

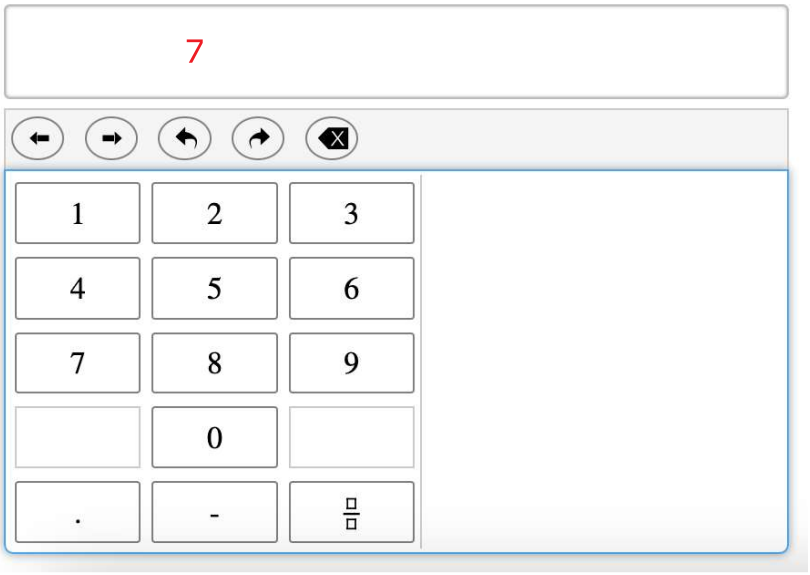
Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.1.1

Benchmark Description: Extend previous understanding of numbers to define rational numbers. Plot, order and compare rational numbers.

26. At a factory, 2 cars are assembled every 36 hours of run time.

How many cars are assembled at the factory every 126 hours of run time?



Answer Key: 7, or any equivalent value

Percentage of Students Answering Correctly: 35%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.3.5

Benchmark Description: Solve mathematical and real-world problems involving ratios, rates and unit rates, including comparisons, mixtures, ratios of lengths and conversions within the measurement system.

27. Which value for x makes the inequality $-3x > 18$ true?

Ⓐ −8
Ⓑ −6
Ⓒ 6
Ⓓ 8

Answer Key: A

Percentage of Students Answering Correctly: 27%

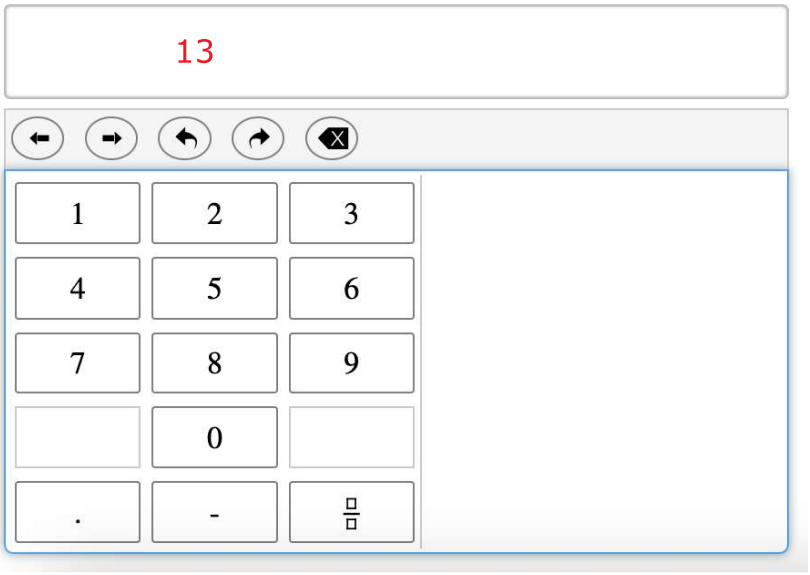
Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.2.1

Benchmark Description: Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false.

28. On a coordinate plane, point *J* is located at (–6, 3) and point *K* is located at (7, 3).

What is the distance, in units, between points *J* and *K*?



Answer Key: 13, or any equivalent value

Percentage of Students Answering Correctly: 38%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.1.2

Benchmark Description: Find distances between ordered pairs, limited to the same x-coordinate or the same y-coordinate, represented on the coordinate plane.

29. The average temperatures, in degrees Celsius, in a city on 10 consecutive days are shown.

{7.1, 6.6, 10.1, 5.9, 7.9, 10.1, 9.2, 7.9, 7.1, 7.1}

Select a number and phrase to describe the range of the data.

The range of the data is

Ⓐ 10.1
Ⓑ 7.9
Ⓒ 7.5
Ⓓ 7.1
Ⓔ 5.8
Ⓕ 4.2

and it describes

Ⓐ the spread of
Ⓑ the middle value of
Ⓒ the maximum value of
Ⓓ the value most often found in

the data.

Answer Key: F, A

Percentage of Students Answering Correctly: 26%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.DP.1.2

Benchmark Description: Given a numerical data set within a real-world context, find and interpret mean, median, mode and range.

30. What is the value of |−12| − |5|?

Ⓐ −17

Ⓑ −7

Ⓒ 7

Ⓓ 17

Answer Key: C

Percentage of Students Answering Correctly: 44%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.1.4

Benchmark Description: Solve mathematical and real-world problems involving absolute value, including the comparison of absolute value.

31. What is the product of 3.74 and 0.8?

Ⓐ 2.982

Ⓑ 2.992

Ⓒ 29.82

Ⓓ 29.92

Answer Key: B

Percentage of Students Answering Correctly: 50%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.2.1

Benchmark Description: Multiply and divide positive multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency.

32. Ana and Brett evaluate the expression $\frac{4}{5} \div 2\frac{5}{11}$.

- Ana's answer is $\frac{135}{44}$.
- Brett's answer is $3\frac{3}{44}$.

Who evaluated the expression correctly?

Ⓐ Ana

Ⓑ Brett

Ⓒ both Ana and Brett

Ⓓ neither Ana nor Brett

Answer Key: D

Percentage of Students Answering Correctly: 49%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.2.2

Benchmark Description: Extend previous understanding of multiplication and division to compute products and quotients of positive fractions by positive fractions, including mixed numbers, with procedural fluency.

33. An expression is shown.

$$435 + 105$$

Which is an equivalent expression?

Ⓐ 15 (29 + 7)

Ⓑ 5 (87 + 20)

Ⓒ 3 (135 + 35)

Ⓓ 29 (15 + 105)

Answer Key: A

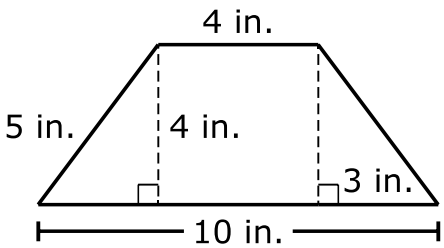
Percentage of Students Answering Correctly: 58%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.3.2

Benchmark Description: Rewrite the sum of two composite whole numbers having a common factor, as a common factor multiplied by the sum of two whole numbers.

34. Vanessa makes a shelf in the shape of an isosceles trapezoid for a corner bookcase. The shelf, with dimensions in inches (in.), is shown.



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

Ⓐ 28
Ⓑ 40
Ⓒ 43
Ⓓ 46

Answer Key: A

Percentage of Students Answering Correctly: 42%

Reporting Category: Geometric Reasoning, Data Analysis, and Probability

Benchmark: MA.6.GR.2.2

Benchmark Description: Solve mathematical and real-world problems involving the area of quadrilaterals and composite figures by decomposing them into triangles or rectangles.

35. An equation is shown.

$$-6x = -72$$

What is the value of x?

Ⓐ −432
Ⓑ −12
Ⓒ 12
Ⓓ 432

Answer Key: C

Percentage of Students Answering Correctly: 35%

Reporting Category: Algebraic Reasoning

Benchmark: MA.6.AR.2.3

Benchmark Description: Write and solve one-step equations in one variable within a mathematical or real-world context using multiplication and division, where all terms and solutions are integers.

36. Select all the values that are located 3 units to the right of 0 on a number line.

Ⓐ 3

Ⓑ –3

Ⓒ |3|

Ⓓ |–3|

Ⓔ –|3|

Ⓕ –|–3|

Answer Key: A, C, D

Percentage of Students Answering Correctly: 32%

Reporting Category: Number Sense and Operations

Benchmark: MA.6.NSO.1.3

Benchmark Description: Given a mathematical or real-world context, interpret the absolute value of a number as the distance from zero on a number line. Find the absolute value of rational numbers.