



MATH Assessment Practice Item Answer Key

Grade 3 – Paper

The following pages include the answer key for all machine-scored items, followed by a sample response for the hand-scored item.

- The rubrics show sample student responses. Student responses other than that shown in the rubric may earn full or partial credit.
- Which responses to hand-scored items receive full or partial credit will be confirmed during range-finding (reviewing sets of real student work)
- If students make a computation error, they can still earn points for reasoning or modeling.

Item Number	Answer Key
1.	B
2.	72
3.	A
4.	A
5.	23
6.	24
7.	B
8.	C
9.	See Rubric
10.	See Rubric
11.	A
12.	Part A: B Part B: D
13.	A
14.	420
15.	A

16.	See Rubric
17.	Part A: 32 Part B: 60
18.	50
19.	Part A: See Rubric Part B: See Rubric Part C: A
20.	D
21.	22
22.	See Rubric
23.	See Rubric

#9 Rubric	
Score	Description
1	Student response is 576. Rationale: $345 + 231 = 576$
0	The response is incorrect or irrelevant.

#10 Rubric	
Score	Description
3	Student response includes the following elements. • Computation component = 1 point: Correct time to start looking at the Window on Collections display • Computation component = 1 point: Correct arrival time • Reasoning/Modeling component = 1 point: Explains how to use a number line diagram to count back twice from the time Stephany finished looking at the display. Sample Student Response: Start at 2:00 p.m. on a number line diagram. Count back 35 minutes to 1:25 p.m. Stephany started looking at the Window on Collections display at 1:25 p.m. On the number line diagram, count back 15 more minutes to 1:10 p.m. Stephany arrived at the museum at 1:10 p.m. Or other valid approaches are acceptable.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

#16
Rubric

Score	Description
3	Student response includes the following elements. • Modeling component = 1 point: Valid expression to find the area of the rectangle. • Computation component = 1 point: Correct value for the area, in square units, of the rectangle, 40 • Modeling component = 1 point: Valid explanation or work shown for finding the area. Sample Student Response: 8×5 There are 8 unit squares along the length and 5 unit squares along the width of the figure. The figure can be covered without gaps or overlaps by 8×5, or 40 unit squares. So, the area of the figure is 40 square units. Or other valid approaches are acceptable.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

#19
Rubric

Rubric Part A

Score	Description
2	Student response includes the following elements. • Modeling component = 1 point: Valid equation to show how many fiction books Lily has now, for example, $35 - 15 + 5 + 2 = 27$. • Computation component = 1 point: Correct number of fiction books Lily has now, 27 books. Sample Student Response:

	$35 - 15 + 5 + 2 = 27$ Lily has 27 fiction books now. Note: Other valid approaches are acceptable.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.
Rubric Part B	
Score	Description
3	Student response includes the following elements. Computation component 1 = 1 point: Correct number of history books, 409. Computation component 2 = 1 point: Correct number of fairy-tale books, 455. Modeling component = 1 point: Valid inequality correctly comparing the number of history books to the number of fairy-tale books, e.g., $409 < 455$. There are 409 history books. There are 455 fairy-tale books. $409 < 455$. Note: - Other valid approaches are acceptable.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

#22 Rubric	
Score	Description
3	Student response includes the following elements. Modeling component = 1 point: Correct description of how to find the area of the playground

	• Computation component = 1 point: Correct area of the playground • Modeling component = 1 point: Correct explanation for the units to use for the area of the playground Sample Student Response: One way to find the area of the playground is the count the number unit squares. There are 44 unit squares. Since each unit square represents 1 square yard, the area of the playground is 44 square yards. Or other valid approaches are acceptable.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

#23 Rubric	
Score	Description
4	Student response includes the following elements. • Computation component 1 = 1 point: Correct number of unit squares Pedro will use to completely cover the flag without gaps or overlaps • Reasoning component 1 = 1 point: Correct explanation of how Pedro can use tiling to find the area of the flag • Reasoning component 2 = 1 point: Correct explanation of how Pedro can use multiplication to find the area of the flag • Modeling component 1 = 1 point: Correct expression to find the area of the flag after separating the flag into two smaller rectangles with lengths of 10 units and 2 units Sample Student Response: The flag can be covered with 8 rows of 12 unit squares, or 96 unit squares. Since Pedro uses 96 unit squares to cover the flag and each unit square has an area of 1 square foot, the area of the flag is 96 square feet. The length of the flag is 12 unit squares, or 12 feet. The width of the flag is 8 unit squares, or 8 feet. Pedro can multiply the length, 12 feet, by the width, 8 feet, to find that the area of the flag is 12×8, or 96 square feet. Pedro separates the flag into two smaller rectangles with lengths of 10 units, or 10 feet, and 2 units, or 2 feet. The width of each rectangle is 8 feet. So, the expression $10 \times 8 + 2 \times 8$ can be used to find the area of the flag.

	Or other valid approaches are acceptable.
3	Student response includes 3 of the 4 elements.
2	Student response includes 2 of the 4 elements.
1	Student response includes 1 of the 4 elements.
0	Student response is incorrect or irrelevant.