

## Practice Test Answer and Alignment Document

### Mathematics: Grade 3

### Online

The following pages include the answer keys for all machine-scored items. A sample student response for the top score is included for all hand-scored constructed response items.

- Some answer keys include one possible sample student response. Other valid methods for solving the problem can earn full credit unless a specific method is required by the item.
- In items where the scores are awarded for full and partial credit, the definition of 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.

### Section 1

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	A	3.OA.A.2
2.	$\frac{1}{6}$ or equivalent	3.NF.A.2a
3.	A	3.MD.B.3
4.	$8 \times [6] = 48$ $[7] = 21 \div 3$ $45 \div 9 = [5]$	3.OA.C.7-2
5.	B	3.G.A.2
6.	$\frac{3}{8}$ or equivalent	3.NF.A.1
7.	The result will always be an [even] number, and the digit in the ones place will always be [0].	3.OA.D.9
8.	A, C	3.NF.A.3a

<b>Item Number</b>	<b>Answer Key</b>	<b>Evidence Statement Key/ Content Scope</b>
9.	C	3.MD.C.7b
10.	405	3.NBT.A.2
11.	B, D	3.OA.B.5
12.	B	3.NF.A.3d

## Section 2

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	The student should have [multiplied 8 by 2], then [multiplied 10 by 2], and then added the two products.	3.R.2 3.MD.D.8
2.	C, D	3.M.1 3.NBT.A.2 3.M.1-1
3.	<p><b><u>Sample Top Score Response</u></b></p> <p>There are 9 supply boxes and each box will need 6 colored markers, so the equation <math>6 \times 9 = 54</math> means that the teacher needs a total of 54 colored markers to fill the supply boxes.</p> <p>The teacher needs 54 colored markers and the teacher already had 15 colored markers, so the equation <math>54 - 15 = 39</math> means that the teacher needs 39 more colored markers to fill the supply boxes.</p> <p>The teacher’s thinking is correct.</p> <p><b>Refer to the Holistic Rubric for 3-Point Reasoning Constructed Response Items for score point information.</b></p>	3.R.4 3.OA.A.3-1
4.	C	3.M.1 3.MC.C.7b 3.M.1-3
5.	<p><b><u>Sample Top Score Response</u></b></p> <p>The area of the smaller rectangle that is <math>8 \times 6</math> is 48 square feet. The area of the larger rectangle that is <math>10 \times 9</math> is 90 square feet. The area of both rectangles is <math>48 + 90 = 138</math> square feet.</p> <p><b>Refer to the Holistic Rubric for 3-Point Modeling Constructed Response Items for score point information.</b></p>	3.M.1 3.MD.D.8 3.M.1-4

Item Number	Answer Key	Evidence Statement Key/ Content Scope
6.	<p>The point on the number line can be used to show that <math>\left[\frac{8}{8} = 1\right]</math> and <math>\left[\frac{1}{1} = 1\right]</math>.</p>	<p>3.R.1 3.NF.A.3c</p>

### Section 3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	D	3.OA.A.3-2
2.	A, B, D	3.NF.A.3b
3.	C	3.MD.C.7d
4.	The first shape is <b>not</b> a quadrilateral. The second shape is a quadrilateral. The third shape is a quadrilateral.	3.G.A.1
5.	$\frac{2}{3}$ or equivalent	3.NF.A.2b
6.	C	3.MD.A.2
7.	The student should select the circle located at 150 on the number line.	3.NBT.A.1
8.	C, E	3.OA.C.7-1
9.	2	3.NF.A.3c
10.	A	3.OA.A.1
11.	B, D	3.MD.D.8

## Section 4

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	C	3.M.1 3.OA.A.3-2 3.M.1-2
2.	D	3.R.4 3.OA.A.3-1
3.	<p><b><u>Sample Top Score Response</u></b></p> <p><b>Part A:</b> The number of labels that Rafael needs is found by calculating the area of the board. The area is calculated by multiplying the length by the width of the board. The length is 12 inches and the width is 8 inches. The area, in square inches, of the board is <math>8 \times 12 = 96</math>. The area, in square inches, of each label is <math>1 \times 1 = 1</math>. The number of labels needed to cover the board is 96.</p> <p><b>Part B:</b> The least number of packages of labels is found by dividing the number of labels by the number of labels in each package. Rafael needs 96 labels. There are 6 labels in each package.</p> $96 \div 6 = 16$ <p>So, Rafael needs 16 packages of labels.</p> <p><b>Refer to the Holistic Rubric for 3-Point Modeling Constructed Response Items for score point information.</b></p>	3.M.1 3.MD.C.7b 3.M.1-4
4.	$9 \times 4$ or equivalent expression	3.M.1 3.OA.A.1 3.M.1-3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
5.	<p><b><u>Sample Top Score Response</u></b></p> <p>There are 4 rows of pennies in the array so the student could make 4 stacks of pennies. Since there are 5 pennies in each row, there would be 5 pennies in each stack.</p> <p>There are 5 columns of pennies in the array, so the student could make 5 stacks of pennies. Since there are 4 pennies in each column, there would be 4 pennies in each stack.</p> <p>If I divide the array in half between the second and third rows, there would be 10 pennies in the top two rows and 10 pennies in the bottom two, so the student could make 2 stacks of pennies with 10 pennies in each stack.</p> <p><b>Refer to the Holistic Rubric for 3-Point Reasoning Constructed Response Items for score point information.</b></p>	<p>3.R.1 3.OA.A.2</p>
6.	C, E	<p>3.R.3 3.OA.B.5</p>