

## Practice Test Answer and Alignment Document Mathematics: Grade 6 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.	B	6.NS.B.2
2.	9	6.EE.A.1-2
3.	The student should select the circle located at 3 on the number line.	6.NS.C.7c-1
4.	The graph will be a ray that starts at [15] and points to the [left]. The graph [will] include the endpoint of the ray.	6.EE.B.8
5.	A	6.NS.B.3-2
6.	$w - 3$	6.EE.B.6
7.	A, C, D	6.RP.A.1
8.	D	6.NS.A.1

Item Number	Answer Key	Evidence Statement Key/ Content Scope
9.	$56 + 91 = [7]([13] + [8])$ or $56 + 91 = [7]([8] + [13])$	6.NS.B.4-2
10.	A, D	6.EE.A.4
11.	The number $-7\frac{1}{2}$ would be positioned to the [left] of $-7$ on a horizontal number line because $[-7\frac{1}{2} < -7]$ .	6.NS.C.6c-1
12.	Quadrant IV	6.NS.C.8
13.	The first graph is skewed to the right. The second graph is skewed to the left. The third graph is symmetric.	6.SP.A.2
14.	C	6.NS.B.3-3

## Section 2

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	A	6.EE.B.5-2
2.	60	6.G.A.2-1
3.	The number of batches of cookies the baker can make from each pound of cookie dough is [2]. The total number of batches of cookies the baker can make from the 8 pounds of cookie dough made is [16].	6.M.1 6.EE.C.9 6.M.1c
4.	<p><b><u>Sample Top Score Response</u></b></p> <p>A rate of 2 chairs every 10 minutes is equivalent to 1 chair every 5 minutes. To make 5 chairs, a time of <math>5 \times 5 = 25</math> minutes is required.</p> <p>Since 2 chairs are made every 10 minutes, the value <math>32 \div 2 = 16</math> should be multiplied by 10. <math>16 \times 10 = 160</math>, so 160 minutes are required to make 32 chairs.</p> <p><b>Refer to the Holistic Rubric for 4-Point Reasoning Constructed Response Items for score point information.</b></p>	6.R.1a 6.RP.A.3b
5.	A	6.M.1 6.EE.C.9 6.M.1d
6.	D	6.R.2c 6.NS.C.7d
7.	125 refrigerators	6.RP.A.3c-2

## Section 3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	D	6.RP.A.3b
2.	The student should graph two of the following points: (0, 0), (1, 24), (2, 48), (3, 72), (4, 96), (5, 120).	6.EE.C.9
3.	<p><b><u>Sample Top Score Response</u></b></p> <p>The painter did not multiply the mixed numbers correctly. The painter incorrectly multiplied the whole numbers together and the fractions together, then added the sums.</p> $2\frac{1}{2} \times 3\frac{1}{2} = \frac{5}{2} \times \frac{7}{2} = \frac{35}{4}$ $2\frac{1}{2} \times 4\frac{1}{2} = \frac{5}{2} \times \frac{9}{2} = \frac{45}{4}$ $3\frac{1}{2} \times 4\frac{1}{2} = \frac{7}{2} \times \frac{9}{2} = \frac{63}{4}$ <p>The total surface area is</p> $2\left(\frac{35}{4}\right) + 2\left(\frac{45}{4}\right) + 2\left(\frac{63}{4}\right) = \frac{286}{4} = 71\frac{1}{2}$ <p>square feet.</p> <p><b>Refer to the Holistic Rubric for 3-Point Modeling Constructed Response Items for score point information.</b></p>	<p>6.M.1 6.G.A.2-2 6.G.A.4 6.M.1e</p>
4.	C	6.R.3a 6.EE.A.3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
5.	<p><b><u>Sample Top Score Response</u></b></p> <p>The mistake was using the reciprocal of both fractions and not only the divisor.</p> <p>To find <math>x</math>, the number of portions in the jar, divide <math>\frac{3}{4}</math> by <math>\frac{1}{10}</math>.</p> $x = \frac{3}{4} \div \frac{1}{10} = \frac{3}{4} \times \frac{10}{1} = \frac{30}{4} = 7\frac{1}{2}$ <p>There will be 7 whole portions of glitter.</p> <p><b>Refer to the Holistic Rubric for 3-Point Reasoning Constructed Response Items for score point information.</b></p>	6.R.2b 6.NS.A.1
6.	6	6.M.1 6.RP.A.3b 6.M.1c
7.	6	6.SP.B.5

## Section 4

Item Number	Answer Key	Evidence Statement Key/Content Scope
1.	A	6.EE.A.2a
2.	A, B, E	6.G.A.3
3.	B	6.R.1a 6.RP.A.3a
4.	<p><b><u>Sample Top Score Response</u></b></p> <p>The length of 2-inch wood needed is <math>2(18 + 2 + 2) + 2(24) = 92</math> inches.</p> <p>The areas of the top and bottom pieces are each <math>2 \times 22 = 44</math> square inches.</p> <p>The areas of the side pieces are each <math>2 \times 36 = 72</math> square inches.</p> <p>The total area is <math>44 + 44 + 72 + 72 = 232</math> square inches.</p> <p><b>Refer to the Holistic Rubric for 4-Point Modeling Constructed Response Items for score point information.</b></p>	6.M.1 6.EE.B.6 6.M.1b 6.M.1c
5.	B	6.R.3b 6.EE.B.5-1
6.	B, C, E	6.M.1 6.M.1a 6.RP.A.3b
7.	$\frac{3}{8}$ or equivalent	6.EE.B.7