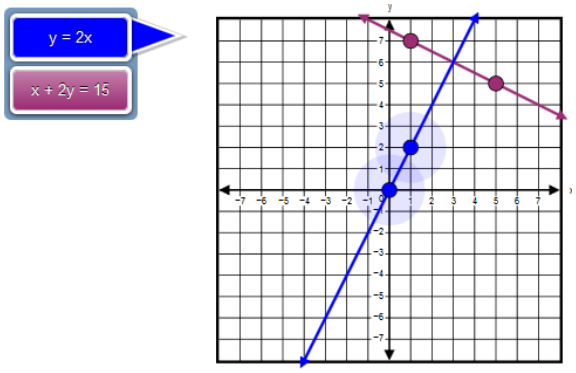
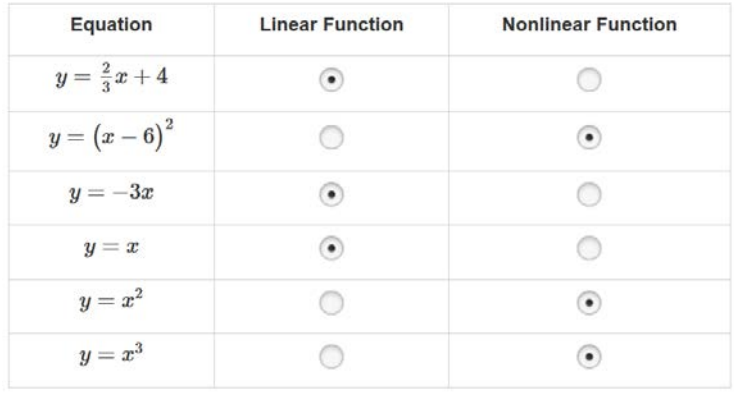
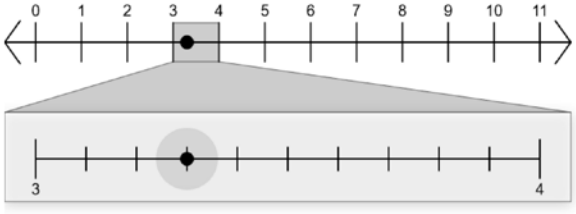
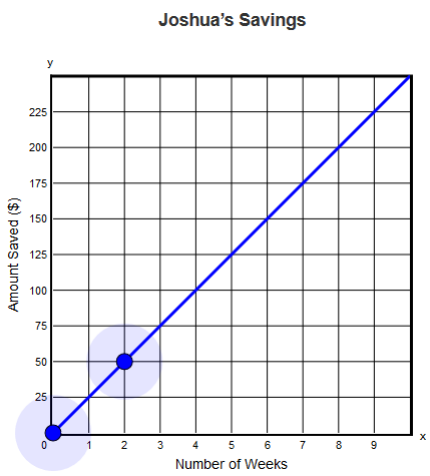
Grade 8 Mathematics Computer-Based Practice Test Answer Key

The following pages include the answer key for all machine-scored items, followed by rubrics for the hand-scored items. The rubrics also show sample student responses; 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, students can still earn points for reasoning or modeling even if they make a computation error.

Session 1

<table>
<tr><th>Item Number</th><th>Item Type</th><th>Answer Key</th><th>Number of Points</th><th>Standard</th></tr>
<tr><td>1</td><td>SA</td><td> 
</td><td>1</td><td>8.EE.C.8</td></tr>
<tr><td>2</td><td>SA</td><td>-67</td><td>1</td><td>8.EE.A.2</td></tr>
<tr><td>3</td><td>SR</td><td> 
</td><td>1</td><td>8.F.A.3</td></tr>
<tr><td>4</td><td>SR</td><td>Part A: D
Part B: B</td><td>2</td><td>8.G.A.3</td></tr>
<tr><td>5</td><td>SA</td><td> 
</td><td>1</td><td>8.NS.A.2</td></tr>
<tr><td>6</td><td>SR</td><td>B, D, E</td><td>1</td><td>8.F.A.2</td></tr>
</table>

Session 2

Item Number	Item Type	Answer Key	Number of Points	Standard
1	SA	(7, 67)	1	8.SP.A.1
2	SA		1	8.EE.B.5
3	SR	B, D, E	1	8.SP.A.4
4	SR	C	1	8.G.A.4
5	SR	$T =$ [5] $m +$ [40]	1	8.F.B.4
6	CR	*See rubric*	4	8.G.A.3

Rubric is on the next page.

Scoring Rubric for Grade 8 Practice Test **Session 2 – Question #6**

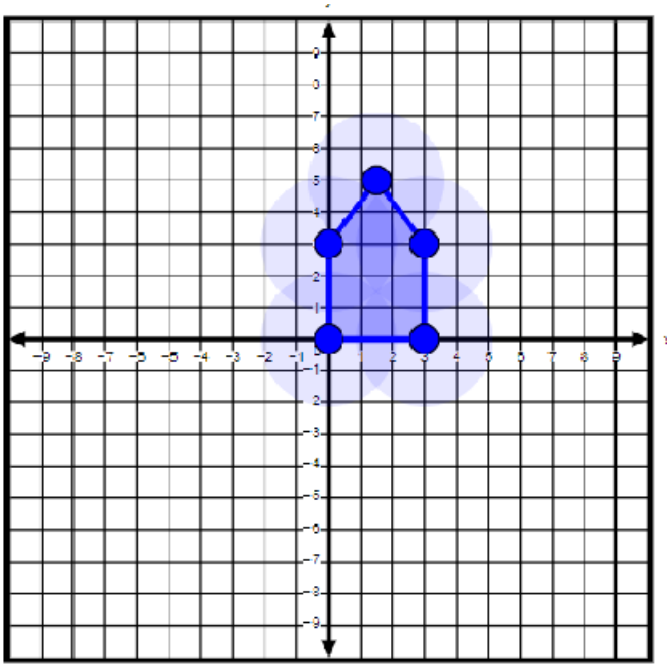
Scoring Guide	
Score	Description
4	The student response demonstrates an exemplary understanding of the Geometry concepts involved in describing the effects of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. The student identifies coordinates, plots the image of a pentagon after it has been translated, and identifies the coordinates of the images of two vertices of a quadrilateral after two transformations.
3	The student response demonstrates a good understanding of the Geometry concepts involved in describing the effects of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result the response merits 3 points.
2	The student response demonstrates a fair understanding of the Geometry concepts involved in describing the effects of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Geometry concepts involved in describing the effects of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
0	The student response contains insufficient evidence of an understanding of the Geometry concepts involved in describing the effects of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates to merit any points.

Sample Response is on the next page.

Sample Response:

a. $(-3, 0)$

b.



c. $(3, 0)$

d. J' (2, -9). It is (6, -9) after it is reflected over the x-axis, and then (2, -9) when it is translated four units to the left.

M' (-2, -4). It is (2, -4) after it is reflected over the x-axis, and then (-2, -4) when it is translated four units to the left.