

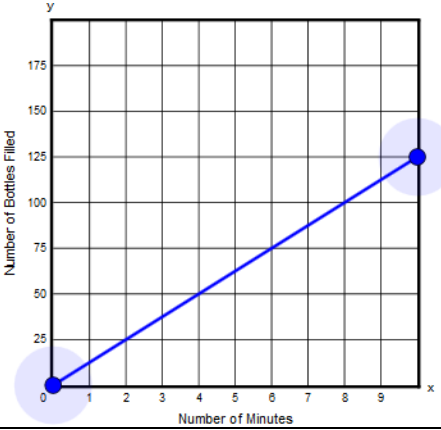
Grade 8 Mathematics Computer-Based Practice Test Answer Key

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

Session 1

Item Number	Item Type	Answer Key	Number of Points	Standard																					
1	SA		1	8.EE.C.08																					
2	SA	13 or -13	1	8.EE.A.02																					
3	SA	<table border="1"> <thead> <tr> <th>function</th> <th>$y = 7 \times 4x$</th> <th>$y = (2x + 5)^2$</th> <th>$y = 10x^2$</th> <th>$y = 5x - 3$</th> <th>$y = \frac{x}{2}$</th> <th>$y = 2x^3 + 1$</th> </tr> </thead> <tbody> <tr> <td>linear</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>nonlinear</td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> </tbody> </table>	function	$y = 7 \times 4x$	$y = (2x + 5)^2$	$y = 10x^2$	$y = 5x - 3$	$y = \frac{x}{2}$	$y = 2x^3 + 1$	linear	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	nonlinear	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	1	8.G.A.03
function	$y = 7 \times 4x$	$y = (2x + 5)^2$	$y = 10x^2$	$y = 5x - 3$	$y = \frac{x}{2}$	$y = 2x^3 + 1$																			
linear	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>																			
nonlinear	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>																			
4	SR	Part A: D; Part B: C	2	8.NS.A.02																					
5	SA		1	8.F.A.03																					
6	SA	<p>The slope of the line that represents function H is <input type="text" value="3/2"/> and the y-intercept is <input type="text" value="-2"/>.</p> <p>The rate of change of function K is <input type="text" value="less than"/> the rate of change of function H.</p>	1	8.F.A.02																					

Session 2

Item Number	Item Type	Answer Key	Number of Points	Standard
1	SA	(7, 67)	1	8.SP.A.01
2	SA		1	8.EE.B.05
3	SR	B, D, E	1	8.SP.A.04
4	SR	C	1	8.G.A.04
5	SA	$T = \boxed{5}m + \boxed{40}$	1	8.F.A.04
6	CR	See rubric	4	8.G.A.03

Scoring Rubric for Grade 8 Practice Test;

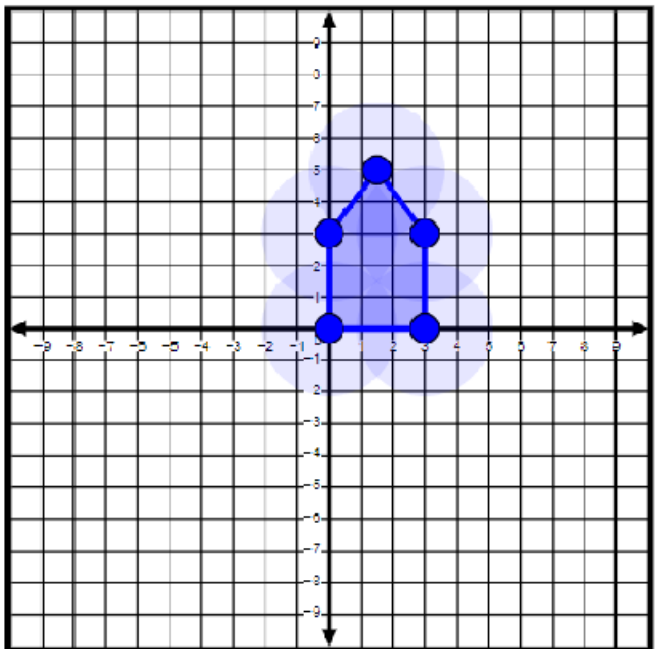
Session 2, Item #6:

Scoring Guide

Score	Descriptions
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 rectangle 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 :

- 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.