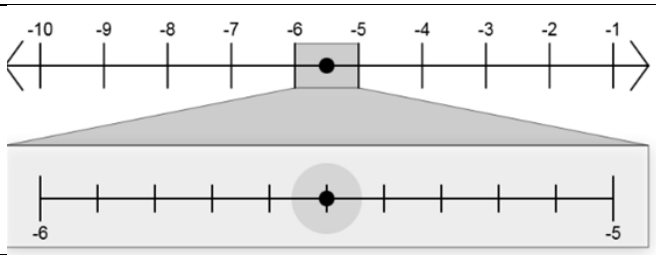
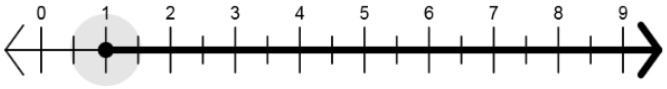
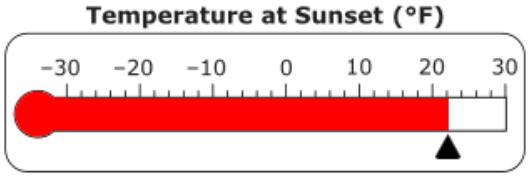
Grade 7 Mathematics Computer-Based Practice Test Answer Key

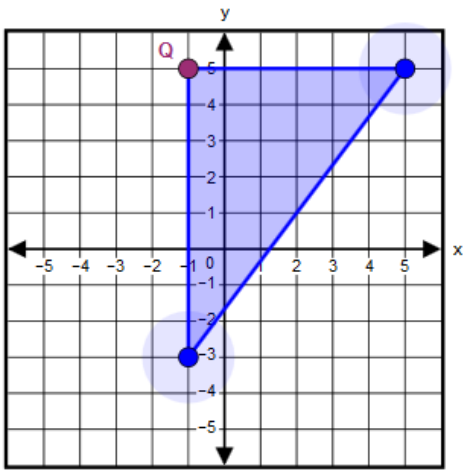
The following pages include the answer key for all machine-scored items, followed by the rubrics for the hand-scored items. – The rubrics show sample student responses. Other valid methods for solving the problem can earn full credit unless a specific method is required by the item. In items where the 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	7.NS.A.01
2	SA		1	7.EE.B.04
3	SA	Part A: 12.5; Part B: 0.8	2	7.G.A.01
4	SA	$\frac{7}{8} - \left(-2 + \frac{3}{4}\right) = ($ 2 $+$ -3/4 $) + \frac{7}{8}$	1	7.EE.A.02
5	SA		1	7.NS.A.03
6	SA	Reading Rates Monday: Number of Pages Read $8\frac{1}{4}$; Time (hour) $\frac{1}{6}$; Rate (pages per hour) $49\frac{1}{2}$ Tuesday: Number of Pages Read 30; Time (hour) $\frac{1}{2}$; Rate (pages per hour) 60 Wednesday: Number of Pages Read 80; Time (hour) 2; Rate (pages per hour) 40	1	7.RP.A.01

Session 2

Item Number	Item Type	Answer Key	Number of Points	Standard
1	SR	C, E, F	1	7.G.A.03
2	SA	$\frac{1}{9}$ or equivalent	1	7.SP.C.07

3	SA		1	7.G.A.02
4	SA		1	7.G.A.03
5	SR	A	1	7.NS.A.03
6	CR	See Rubric	4	7.RP.A.03

Scoring Rubric for Grade 7 Practice Test;

Session 2, Item #6:

Scoring Guide

Score	Description
4	The student response demonstrates an exemplary understanding of the Ratios and Proportional Relationships concepts involved in using proportional relationships to solve multi-step ratio and percent problems. The student uses proportional relationships in three different situations to solve for either distance, time, or rate.
3	The student response demonstrates a good understanding of the Ratios and Proportional Relationships concepts involved in using proportional relationships to solve multi-step ratio and percent problems. 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 Ratios and Proportional Relationships concepts involved in using proportional relationships to solve multi-step ratio and percent problems. 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 Ratios and Proportional Relationships concepts involved in using proportional relationships to solve multi-step ratio and percent problems.
0	The student response contains insufficient evidence of an understanding of the Ratios and Proportional Relationships concepts involved in using proportional relationships to solve multi-step ratio and percent problems to merit any points.

Sample Response:

a. $d = rt;\ d = 10\left(\frac{1}{2}\right),\ d = 5$ miles

b. It will take Derrick 20 minutes to get to the park.

$d = rt;\ 3 = 9t,\ t = \frac{1}{3}$ hour or 20 minutes

OR

$\frac{9}{60} = \frac{3}{x},\ 9x = 180,\ x = 20$ minutes

c. $d = rt;\ 2.5 = r\left(\frac{1}{5}\right),\ r = 12.5$ miles per hour