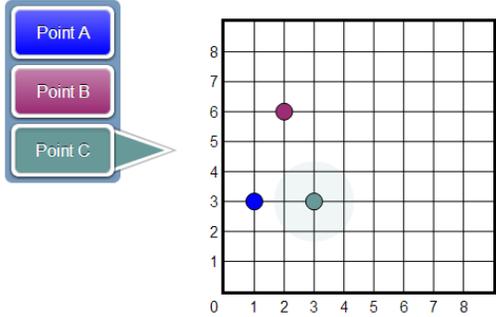# Grade 5 Mathematics Computer-Based Practice Test Answer Key

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	Answer Key	Standard
1	C	5.NBT.2
2	33	5.OA.1
3	The product of $\frac{3}{5}$ and 4 is [less than ▼] 4. The product of $1\frac{1}{2}$ and 2 is [greater than ▼] 2. The product of $\frac{5}{2}$ and $\frac{13}{4}$ is [greater than ▼] $\frac{13}{4}$.	5.NF.5
4	60	5.MD.4
5	17/20	5.NF.1
6	*See rubric*	5.NBT.7

Session 2

Item Number	Answer Key	Standard
1	D	5.OA.3
2	Part A: Part B: D	5.G.2
3	180	5.MD.5
4	9 - (2 + 4) 2 + 4 - 9 9 - 2 + 4	5.OA.2
5	B, C	5.MD.1
6	*See rubric*	5.NF.2

Rubrics start on the next page.

Scoring Rubric for Grade 5 Practice Test; Session 1, Item #6:

Score	Description
4	The student response demonstrates an exemplary understanding of the Number and Operations in Base Ten concepts involved in adding, subtracting, multiplying, and dividing decimals to hundredths. The student uses decimals to solve a real-world problem.
3	The student response demonstrates a good understanding of the Number and Operations in Base Ten concepts involved in adding, subtracting, multiplying, and dividing decimals to hundredths. 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 Number and Operations in Base Ten concepts involved in adding, subtracting, multiplying, and dividing decimals to hundredths. 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 Number and Operations in Base Ten concepts involved in adding, subtracting, multiplying, and dividing decimals to hundredths.
0	The student response contains insufficient evidence of an understanding of the Number and Operations in Base Ten concepts involved in adding, subtracting, multiplying, and dividing decimals to hundredths to merit any points.

Sample Response:

a. The cost is $11.70.
$2.6 \times 4.50 = 11.70$
b. He needs 2.75 pounds.
$5.50 - 2.75 = 2.75$
c. Terry makes 27 meatballs.
$8.1 \div .3 = 27$

Scoring Rubric for Grade 5 Practice Test; Session 2, Item #6:

Score	Description
3	Student response includes each of the following 3 elements. • Reasoning component: Valid explanation of why the Craig's answer is not reasonable • Computation component: Correct number of miles Craig rode is $\frac{9}{8}$ • Reasoning component: Valid explanation using number line to show why answer is correct Sample Student Response: Craig's answer is not reasonable because $\frac{5}{8}$ is more than $\frac{1}{2}$ and he is adding $\frac{1}{2}$ to a number that is more than $\frac{1}{2}$ so his answer should be more than 1. Craig rode $\frac{5}{8} + \frac{1}{2} = \frac{5}{8} + \frac{4}{8} = \frac{9}{8}$ miles. Since $\frac{4}{8} = \frac{1}{2}$, I start at $\frac{5}{8}$ on the number line and move over 4 more $\frac{1}{8}$s to add $\frac{5}{8} + \frac{4}{8}$. Now I am at the number $\frac{9}{8}$ so I know my answer is correct.
2	Student response includes 2 of the 3 elements. If a computation error is made, the student may still get points for reasoning.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.