## Grade 6 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	SR	The dairy farmer drove at an average rate of 8 miles per gallon of fuel on Monday, and used a total of 12 gallons of fuel on Tuesday.	1	6.RP.A.03
2	SA	Trees Planted in the Park  220 200 180 160 160 160 170 180 180 180 180 180 180 180 180 180 18	1	6.NS.C.08
3	SA	Library Visitors  8 6 50 10 10 10 10 10 10 10 10 10 10 10 10 10	1	6.SP.B.04
4	SA	-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 -1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	6.EE.B.08

5	SA	-7 -6 -5 -4 -3 -2 -1 0	1	6.G.A.03
6	SA	Hours Spent Reading  0 1 2 3 4 5 6 7 8 9 10	1	6.SP.B.04
7	SA	Division Equation True False $128 \div 16 = 8$ $749 \div 11 = 43$ $684 \div 3 = 228$	1	6.NS.B.02
8	CR	See rubric.	4	6.EE.A.02

Session 2

Item Number	Item Type	Answer Key	Number of Points	Standard
1	SA	The ratio 3:6 could describe the ratio of the number of black cars to the number of red cars on the street.	1	6.RP.A.01
2	SA	120	1	6.G.A.01
3	SA	-5 -4 -3 -2 -10 1 2 3 4 5 -1 -2 -2 -3 T -4 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	1	6.NS.C.08
4	SR	D	1	6.SP.B.05
5	SA		1	6.NS.C.06
6	SR	A, C, E	1	6.EE.A.01

7	SA	OR	1	6.NS.A.01	
8	SA	Part A: 3/8 Part B: 1/64	2	6.G.A.02	

## **Scoring Rubric for Grade 6 Practice Test;**

## Session 1, Item #8:

Score	Description
4	The student response demonstrates an exemplary understanding of the Expressions and Equations concepts involved in writing, reading, and evaluating expressions in which letters stand for numbers. The student identifies the coefficient of a term, writes an expression from a verbal description, and evaluates expressions.
3	The student response demonstrates a good understanding of the Expressions and Equations concepts involved in writing, reading, and evaluating expressions in which letters stand for numbers. 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 Expressions and Equations concepts involved in writing, reading, and evaluating expressions in which letters stand for numbers. 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 Expressions and Equations concepts involved in writing, reading, and evaluating expressions in which letters stand for numbers.
0	The student response contains insufficient evidence of an understanding of the Expressions and Equations concepts involved in writing, reading, and evaluating expressions in which letters stand for numbers to merit any points.

## Sample Response:

- a. 6
- b. 6(5) 3 = 30 3 = 27
- c. (2x 1) + 8 or equivalent
- d. (2(5) 1) + 8 = (10-1) + 8 = 9 + 8 = 17, 27 17 = 10