Grade 6 Mathematics Paper-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.

Item Number	Answer Key	Standard
1	A	6.NS.1
2	18	6.SP.4
3	-3.5	6.NS.6
4	Part A: A Part B: A	6.G.2
5	D	6.RP.3
6	*See rubric*	6.EE.2
7	D	6.SP.5
8	Part A: 56 Part B: 12 Part C: 28 Part D: 24	6.RP.3
9	B, E	6.EE.1
10	120	6.G.1
11	C	6.SP.1
12	*See rubric*	6.EE.3

Rubrics start on the next page.

Scoring Rubric for Grade 6 Practice Test Item #6:

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. $(2(5) - 1) + 8 = (10 - 1) + 8 = 9 + 8 = 17, \quad 27 - 17 = 10$

Scoring Rubric for Grade 6 Practice Test Item #12:

Score	Description
3	Student response includes the following 3 elements. • Explanation of why Brianna's thinking is incorrect • Explanation of how to determine which expressions are equivalent • Identifies expressions A and C as equivalent Sample Student Response: Brianna only checked the value of each expression for one substitution of x. To check which expressions are equivalent, I need to check that they are the same value for any substitution of x. Since expressions A and C are both equivalent to the expression $6x - 4$, they will be equivalent for any substitution of x, so they are equivalent.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.