## 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 <br> Number | Answer Key |  |  |  |  | Standard |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A |  |  |  |  | 6.NS. 1 |
| 2 | 18 |  |  |  |  | 6.SP. 4 |
| 3 |  |  |  |  |  | 6.NS. 8 |
| 4 | $\begin{gathered} \text { Part A: } 3 / 8 \\ \text { Part B: } 1 / 64 \\ \hline \end{gathered}$ |  |  |  |  | 6.G.2 |
| 5 | The ribbon costs $\$ 0.008$ |  |  | per | centimeter | 6.RP. 3 |
| 6 | See rubric |  |  |  |  | 6.EE. 2 |

## Session 2



Rubrics start on the next page.

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

| Score | Description |
| :---: | :--- |
| $\mathbf{4}$ | The student response demonstrates an exemplary understanding of the Expressions and <br> Equations concepts involved in writing, reading, and evaluating expressions in which <br> letters stand for numbers. The student identifies the coefficient of a term, writes an <br> expression from a verbal description, and evaluates expressions. |
| $\mathbf{3}$ | The student response demonstrates a good understanding of the Expressions and <br> Equations concepts involved in writing, reading, and evaluating expressions in which <br> letters stand for numbers. Although there is significant evidence that the student was <br> able to recognize and apply the concepts involved, some aspect of the response is <br> flawed. As a result the response merits 3 points. |
| $\mathbf{2}$ | The student response demonstrates a fair understanding of the Expressions and <br> Equations concepts involved in writing, reading, and evaluating expressions in which <br> letters stand for numbers. While some aspects of the task are completed correctly, <br> others are not. The mixed evidence provided by the student merits 2 points. |
| $\mathbf{1}$ | The student response demonstrates a minimal understanding of the Expressions and <br> Equations concepts involved in writing, reading, and evaluating expressions in which <br> letters stand for numbers. |
| $\mathbf{0}$ | The student response contains insufficient evidence of an understanding of the <br> Expressions and Equations concepts involved in writing, reading, and evaluating <br> expressions in which letters stand for numbers to merit any points. |

## Sample Response:

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

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

| Score | Description |
| :---: | :---: |
| 3 | Student response includes the following 3 elements. <br> - Explanation of why Brianna's thinking is incorrect <br> - Explanation of how to determine which expressions are equivalent <br> - Identifies expressions A and C as equivalent <br> Sample Student Response: <br> 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 $x$. <br> Since expressions $A$ and $C$ are both equivalent to the expression $6 x-4$, 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. |

