

# Math 8

# Winter Enrichment Packet

## **ANSWER KEY**



PRINCE GEORGE'S COUNTY PUBLIC SCHOOLS  
Office of Academic Programs  
Department of Curriculum and Instruction

# Math 8 Winter Enrichment Packet Choice Board

## Answer Key

### Activity 1

Student answers will vary. See activity directions and rubric.

### Activity 2

1. The test has 5 multiple choice questions.

The problem can be solved by solving the system:

$$\begin{cases} x + y = 20 \\ 3x + 11y = 100 \end{cases}$$

2. Danielle earns a profit of \$7 for each bracelet and \$26 for each necklace.

The problem can be solved by solving the system:

$$\begin{cases} 2x + 4y = 118 \\ 4x + 4y = 132 \end{cases}$$

### Activity 3

For a *set of ordered pairs* or a *table*, a relation is a function if no  $x$  value has more than one unique  $y$  value assigned to it. A relation is NOT a function if an  $x$  value has more than one  $y$  value assigned to it. For example the relation  $(2, 3), (4, 5)$  and  $(6, 7)$  constitutes a function.

For a *graph line*, a relation is a function if the line never has a segment that is vertical line. A relation is NOT a function if the line has a segment that is vertical line.

For a *mapping diagram*, if more than one line coming from an input value maps to different output values, then the relation is NOT a function. Otherwise, the relation is a function.

### Activity 4

See activity directions and rubric.

### Activity 5

Student answers will vary. See activity directions and rubric.

### Activity 6

Solution match the words: *The teacher told him it was a piece of cake.*

### Activity 7

- The solution for the first system is (1, -2)
- The solution for the second system is (3, -5)

### **Activity 8**

Student answers will vary. See activity directions and rubric.

### **Activity 9**

Student answers will vary. See activity directions and rubric.