

## Evaluating Expressions and Simple Equations Assessment

### Multiple Choice

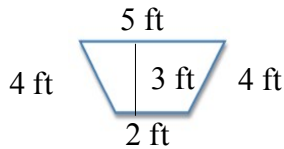
Record your answer on the scan card provided.

Evaluate. (NO CALCULATOR ON THIS PART)

- $(b-2)^2 + a^2$  use  $a=6$ , and  $b=7$ 
  - 22
  - 37
  - 44
  - 61
- $z(x+y)$ ; use  $x=6$ ,  $y=8$ , and  $z=1/2$ 
  - 6
  - 7
  - 14
  - 28
- $c \cdot \frac{bc}{4} + (7-a)$ ; use  $a=4$ ,  $b=-8$ , and  $c=5$ 
  - 4
  - 4
  - 47
  - 47
- $y - (z + z^2)$ ; use  $y = 10$  and  $z = -2$ 
  - 16
  - 16
  - 10
  - 8
- Mr. Hartman is tiling his bathroom. The section that needs to be tiled is 6 ft. by 7 ft. How many square feet of tile does he need?
  - 13
  - 21
  - 26
  - 42
- The radius of a watch is 3 inches. What is the area of the watch?
  - 3.14 in
  - 9.42 in
  - 28.26 in
  - 18.84 in

7. A triangular sail on a model sailboat is one foot long by 2 feet high. How much area of canvas is this?
- A.  $\frac{1}{2}$  square foot
  - B. 1 square foot
  - C. 2 square feet
  - D. 3 square feet

8. A garden is shaped like the trapezoid below. What is the perimeter of the garden?



- A. 6 ft
- B. 8 ft
- C. 15 ft
- D. 16 ft

Solve.

9.  $m + (-23) = 46$

- A. 23
- B. -23
- C. 69
- D. -69

10.  $78 + x = 99$

- A. -21
- B. 21
- C. 177
- D. -177

11.  $g/6 = -12$

- A. -2
- B. 18
- C. 72
- D. -72

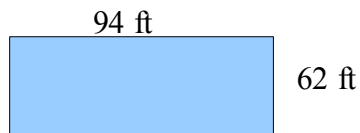
12.  $15k = 75$

- A. 5
- B. -5
- C. 60
- D. 1125

13. A garden is shaped like a rectangle. If the width of the garden is 5 feet and the total area is 45 square feet, what is the length of the garden?

- A. 50 ft
- B. 40 ft
- C. 9 ft
- D. 6 ft

14. The area of the triangle is 36 square centimeters and the base is 6 centimeters. What is the height?
- A. 3 cm
  - B. 6 cm
  - C. 12 cm
  - D. 216 cm
15. The perimeter of an octagonal rug is 40 feet. Each side of the rug is equal length. What is the length of each side?
- A. 5 ft
  - B. 6 ft
  - C. 7 ft
  - D. 8 ft
16. South Warren Middle is refinishing the gym floor. The school needs to know the area of the floor in order to know how much urethane floor coating to purchase. The gym floor is rectangular with a length of 94 feet and a width of 62 feet. What is the area, in square feet, of the gym floor?



- A. 156
- B. 312
- C. 5,828
- D. 12,680
- E. 23,312

**Evaluating Expressions and Simple Equations Assessment**  
**Short Constructed Response**

*Show all of your math work in the space provided.*


1. An expression is shown below.

$$6m + 5p^3 - 1$$

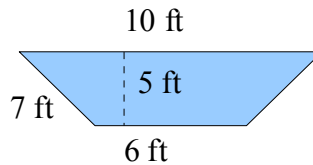
What is the value of the expression when  $m = 1/3$  and  $p = 2$  (NO CALCULATOR)

*Do not write outside this box.*

12.

**STOP!** 


2. Find the area of the given figure.



(NO CALCULATOR)

*Do not write outside this box.*


12.

**STOP!** 

3. Solve the following equation. (NO CALCULATOR)  
 $-144 = -2x$

*Do not write outside this box.*

12.

**STOP!** 

4. The distance around a circular fountain is 21.98 feet. What is the radius of the fountain?  
(MAY USE CALCULATOR HERE)

*Do not write outside this box.*

12.

**STOP!** 