

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Evaluate  $5c$  when  $c = 5$ .

\_\_\_\_\_ 2. Evaluate  $8v$  when  $v = 9$ .

- A. 153
- B. 64
- C. 72
- D. 17

3. To find the mileage, or how many miles per gallon a car can travel, you can use the expression  $\frac{m}{g}$ , where  $m$  is the distance in miles and  $g$  is the number of gallons of gas used. Find the mileage for a car that travels 368 miles on 16 gallons of gas.

4. Evaluate the expression  $x^3$  when  $x = 4$ .

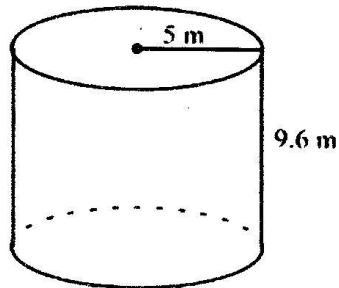
\_\_\_\_\_ 5. Jacob wants to plant some oregano in a cube-shaped planter box. If one side of the box measures 8 inches, how much soil will be needed to fill the planter?

- A.  $64 \text{ in.}^3$
- B.  $384 \text{ in.}^3$
- C.  $171 \text{ in.}^3$
- D.  $512 \text{ in.}^3$

6. Write a variable expression for the volume of a cube whose side length is  $x$ .

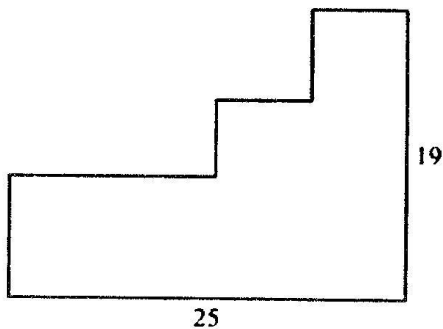
7. Find the volume of a cube 7 inches on each side.

8. Find the surface area of the cylinder to the nearest square meter. Use 3.14 as an approximation for  $\pi$ . (The figure may not be drawn to scale.)



- A. 48 square meters
- B. 229 square meters
- C. 458 square meters
- D. 73 square meters

9. Find the perimeter of the figure. All intersecting line segments are perpendicular and all dimensions are in centimeters. (The figure may not be drawn to scale.)



- A. 44 centimeters
- B. 88 centimeters
- C. 250 centimeters
- D. 475 centimeters