Practice 9.5

Name(s)_____

Solve.

1) You have taken up gardening for relaxation and have decided to fence in your new rectangular shaped masterpiece. The length of the garden is 2 meters and 46 meters of fencing is required to completely enclose it. What is the width of the garden?

2) You are varnishing the background for a rectangular mural. The base of the mural is $6\frac{1}{2}$ meters and the height of the mural is 3 meters. How many cans of varnish will you need if each can covers 10 square meters?

Substitute the given values into the formula and solve for the unknown variable.

3) $V = \frac{1}{3}Bh$; $V = 28$, $h = 4$

4) $A = \frac{1}{2}(b + B)h$; $A = 95$, $b = 19$, $B = 19$

Solve the equation for the indicated variable.

5) $I = Prt$ for r

6) $V = \frac{1}{3}Ah$ for A

7) $A = P + PRT$ for T

8) $S = 2\pi rh + 2\pi r^2$ for h

9) $A = \frac{1}{2}h(B + b)$ for B

10) The perimeter of an equilateral triangle is 15 inches more than the perimeter of a square, and the side of the triangle is 7 inches longer than the side of the square. Find the side of the triangle. (Hint: An equilateral triangle has three sides the same length.)

1) 21 m
2) 2 cans of varnish
3) 21
4) 5
5) $r = \frac{I}{Pt}$
6) $A = \frac{3V}{h}$
7) $T = \frac{A - P}{PR}$
8) $h = \frac{S - 2\pi r^2}{2\pi r}$
9) $B = \frac{2A - bh}{h}$
10)