

**Kerry Ojakian's MTH 28.5 Class**  
**Class Assignment #8**

Solve the following equations for the indicated variable.

1. Solve for  $y$  in the formula  $2x + y = 7$
2. Solve for  $b$  in the formula  $a + b = h^2$
3. Solve for  $L$  in  $A = L \cdot W$  (i.e. Formula for Area of Rectangle). Then use that to do the following:
  - (a) Find the length of a rectangle whose area is 8 and width is 2.
  - (b) Find the length of a rectangle whose area is 20 and width is 4.
  - (c) Find the length of a rectangle whose area is 10 and width is 4.
4. Solve for  $T$  in the formula  $PV = nRT$
5. Solve for  $x$  in the formula  $2x + 6y = 4$
6. Solve for  $x$  in the formula  $-2x + 6y = 4$
7. Solve for  $r$  in the formula  $C = 2\pi r$  (i.e. Formula for Circumference of a circle)
8. Solve for  $L$  in  $P = 2L + 2W$  (i.e. Formula Perimeter of Rectangle). Then use that to do the following:
  - (a) Find the length of a rectangle whose perimeter is 50 and width is 10.
  - (b) Find the length of a rectangle whose perimeter is 100 and width is 40.
  - (c) Find the length of a rectangle whose area is 35 and width is 10.
9. Solve for  $B$  in the formula  $A = \frac{h(B + b)}{2}$
10. Solve for  $y$  in the formula  $3x - 6y = 3$