

Geometry  
Cumulative Review 1-4

Name \_\_\_\_\_  
Period \_\_\_\_\_

Solve for x:

1.)  $2x - (x + 4) = 9$

2.)  $\frac{1}{2}x + \frac{2}{3} = -\frac{1}{3}$

3.)  $\frac{2x+3}{5} = 11$

4.)  $\frac{1}{4}x + 5 = -8$

Solve each system of equation & give answers as a coordinate:

5.)  $2x + y = 8$   
 $x - y = 4$

6.)  $2x + 3y = 1$   
 $x + y = 1$

7.)  $y = 2x - 5$   
 $x - 3y = -5$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Solve each quadratic equation:

8.)  $x^2 - 7x + 12 = 0$

9.)  $3x^2 - 5 = 2x^2 - 4x$

10.)  $x^2 - 9 = 0$

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Find the length of AB: (Round to 10ths if needed)

11.) A(0,4), B(0,-8)

12.) A(-2,1), B(-2,5)

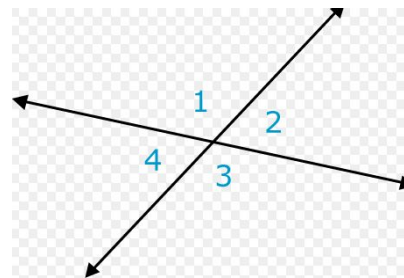
Find the midpoint:

13.) A(3,-1), B(-3,5)

$$\left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Set up an equation and solve for x using the picture to the right:

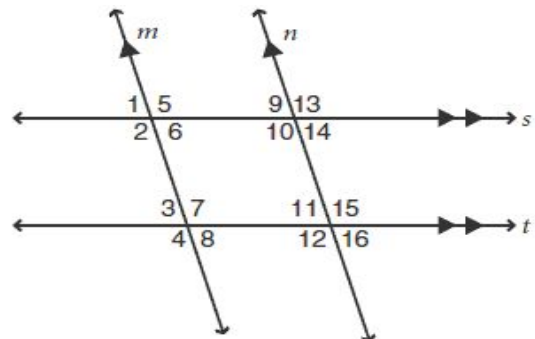
14.)  $\angle 1 = 9x + 6$  &  $\angle 3 = 7x + 12$



15.)  $\angle 2 = 2x + 11$  &  $\angle 3 = 3x + 4$

Use the picture to the right to set up an equation and solve for x for each of the following:

16.)  $\angle 5 = 8x + 13$  &  $\angle 8 = 2x + 7$



17.)  $\angle 13 = 3x + 13$  &  $\angle 15 = 6x - 5$



