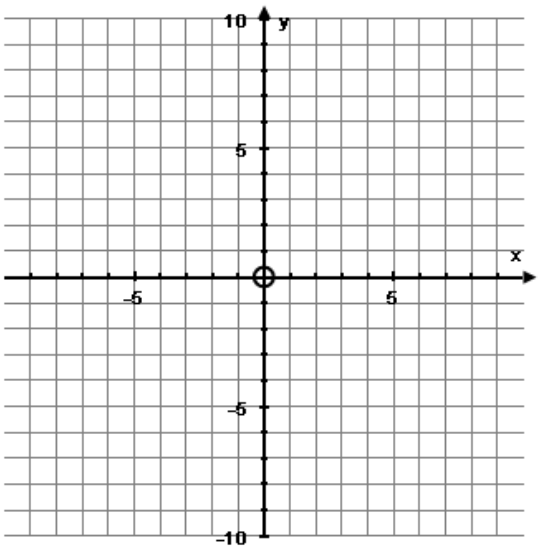
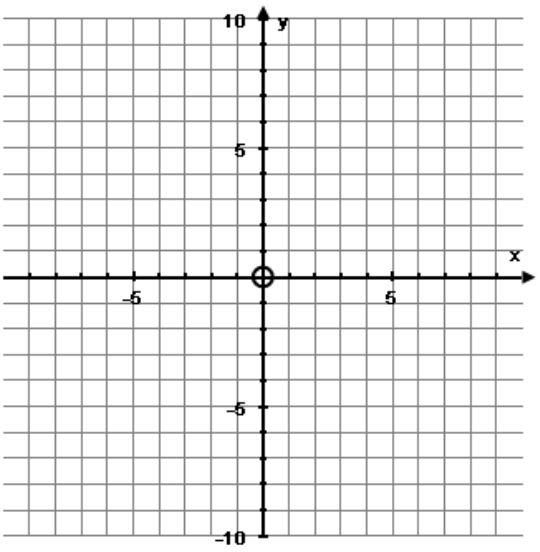
Alpha Geometry **Name:**_____ P_____
Systems of Equations

Solve the systems below by graphing. Be sure to label your graph as appropriate and to state your final solution(s) clearly.

1.) $x = 4$
$y = \frac{3}{4}x + 1$



2.) $5x + 4y = 24$
$y = \frac{1}{4}x$



Use the best method to solve each system of equations algebraically.

3.) $y = 5x - 8$
$4x + 3y = 33$

4.) $2x + 3y = 14$
$3x - 4y = 4$

Use the best method to solve each system of equations algebraically.

5.) $\begin{cases} -3x - 4y = -1 \\ 3x - y = -4 \end{cases}$

6.) $\begin{cases} x - 5y = 10 \\ 2x - 10y = 20 \end{cases}$

7.) $\begin{cases} x + 5y = 4 \\ 3x + 15y = -1 \end{cases}$

8.) $\begin{cases} x = y - 7 \\ x + 8y = 2 \end{cases}$

9.) $\begin{cases} 3x + 2y = -9 \\ 5x - 3y = 4 \end{cases}$

10.) If $2x + y = 5$ and $x - y = 7$, then y is equal to ?