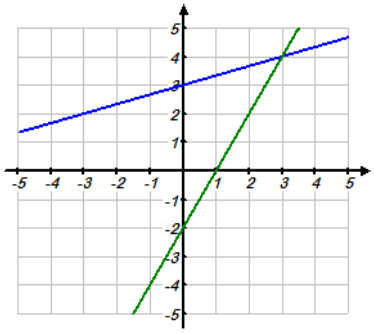
Sec 2.4 – Solving 2 Variable Systems by Graphing

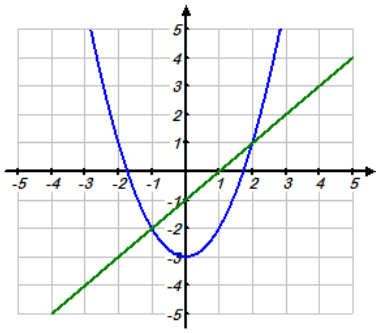
Name:

Each system of equation is shown in graph. Using the graph find the solutions to each of the systems.

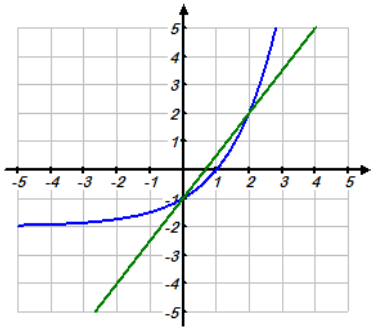
1. $y = \frac{1}{3}x + 3$
   $y = 2x - 2$



2. $y = x^2 - 3$
   $y = x - 1$



3. $y = 2^x - 2$
   $y = \frac{3}{2}x - 1$



Which of the system of equations below have a solution of (– 3, 2) ?

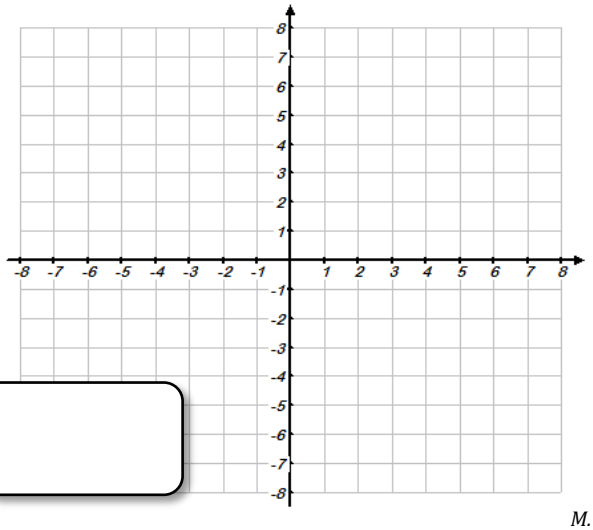
4. $\begin{cases} y = 2x + 8 \\ 3x + 2y = -5 \end{cases}$

5. $\begin{cases} y = \frac{2}{3}x + 4 \\ x = \frac{1}{2}y - 2 \end{cases}$

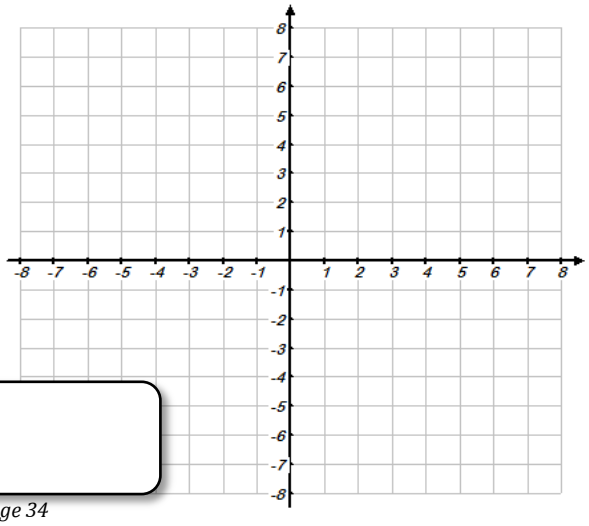
6. $\begin{cases} y + 2x = -4 \\ 3^y + x = 6 \end{cases}$

Graph each system and use the graph to determine a solution.

7. $\begin{cases} y = \frac{1}{2}x - 4 \\ y + 2x = 1 \end{cases}$



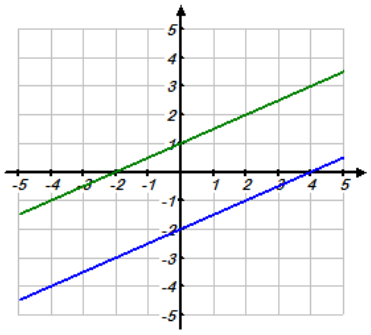
8. $\begin{cases} y = -3x - 6 \\ -2x + 3y = 15 \end{cases}$



Each system of equation is shown in graph. How many solutions does each system have?

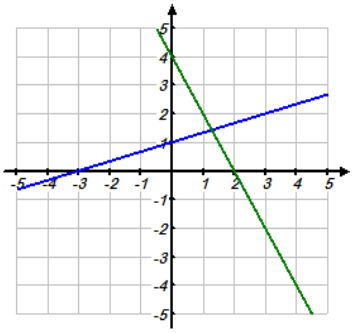
9. $y = \frac{1}{2}x - 2$

$y = \frac{1}{2}x + 1$



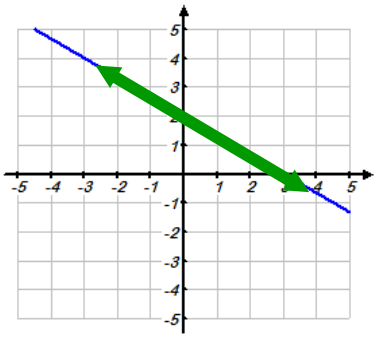
10. $y = \frac{1}{3}x + 1$

$y = -2x + 4$



11. $y = -\frac{2}{3}x + 2$

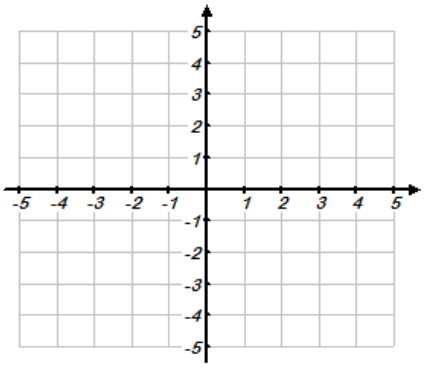
$y = -\frac{2}{3}x + 2$



Graph each system and use the graph to determine a solution.

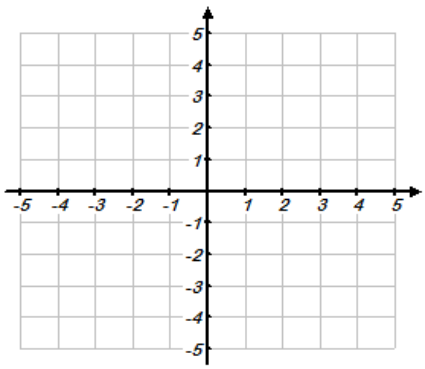
9. $3y = 2x - 6$

$4x - 6y = 12$



10. $4y - 7 = 2x + 1$

$2y - x = -6$



11. $2x = y + 2$

$3y = -2x + 9$