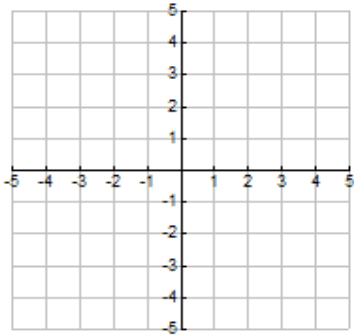


Secondary Math III  
Graphing Systems of Equations  
Assignment 12.1

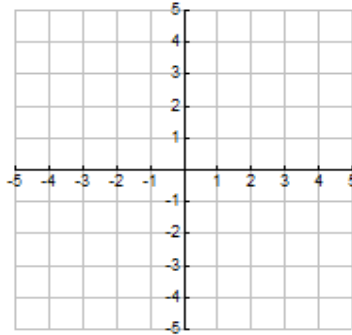
Name \_\_\_\_\_  
Period \_\_\_\_\_

Solve by graphing. Check your solution. Remember to solve for y on both equations.

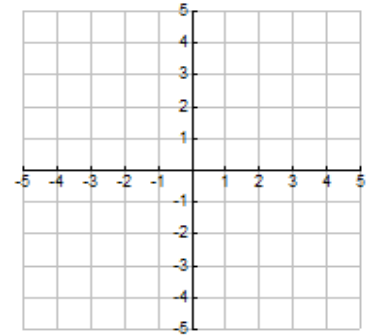
1. 
$$\begin{cases} y = x - 3 \\ y = \frac{-3}{2}x + 2 \end{cases}$$



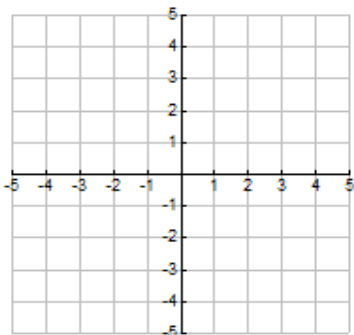
2. 
$$\begin{cases} x = -2 \\ x - y = -1 \end{cases}$$



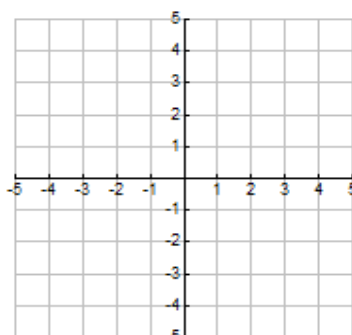
3. 
$$\begin{cases} y = 2x + 4 \\ y = 2x - 1 \end{cases}$$



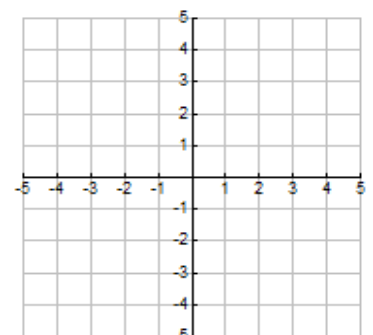
4. 
$$\begin{cases} y = \frac{3}{2}x - 4 \\ y = \frac{1}{4}x + 1 \end{cases}$$



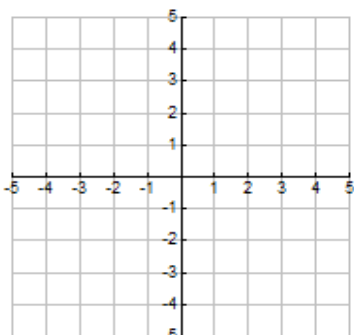
5. 
$$\begin{cases} y = \frac{1}{2}x - 3 \\ y = \frac{1}{2}x - 3 \end{cases}$$



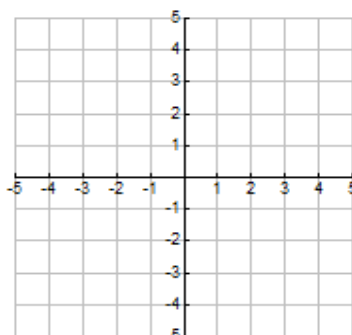
6. 
$$\begin{cases} y = x + 4 \\ y = x - 3 \end{cases}$$



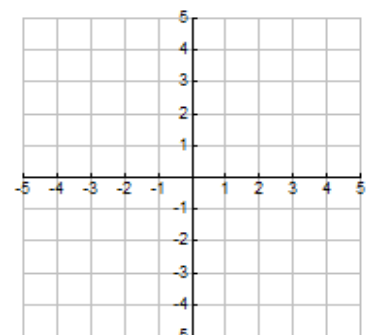
7. 
$$\begin{cases} y = -2x + 4 \\ y = 2 \end{cases}$$



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



9. 
$$\begin{cases} y = -\frac{2}{3}x + 1 \\ y = -\frac{3}{2}x + 1 \end{cases}$$



Write each equation in  $y = mx + b$  form. Then classify the system. **DO NOT SOLVE.**

$$10. \begin{cases} 5x + y = -2 \\ 5x + y = -1 \end{cases}$$

$$11. \begin{cases} -x + 4y = -8 \\ 0 = 4y - 8 + 3x \end{cases}$$

$$12. \begin{cases} x = 1 \\ x + y = 2 \end{cases}$$

$$13. \begin{cases} -2 - \frac{1}{2}y = -x \\ 2x = y + 4 \end{cases}$$

14. Amy has \$100 in savings and plans to save \$25 more each month. Sandy has no money in savings but plans to save \$50 each month. How many months before they have the same amount saved? How much money do they both have at that point?

15. Marine biologists studied the lengths of 2 species of shark for several months. The Greenland Shark had an initial length of 37 cm and grew .75 cm per month. The Spiny Dogfish Shark had an initial length of 22 cm and grew 1.5 cm per month. After how many months are they the same length? What is that length?

16. One electrician(Bob) charges \$50 for a service call and \$60 per hour. Another electrician(Rob) charges \$80 for a service call and \$50 per hour. After how many hours do they charge the same amount? How much do they both cost at that point? Who should you call for a job that requires 5 hours?