Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples
SYSTEMS OF EQUATIONS	
The **SOLUTION** *to a System*	**Graphically:** The point (x, y) where the two lines _____.
	Algebraically: The point (x, y) that makes both equations _____.

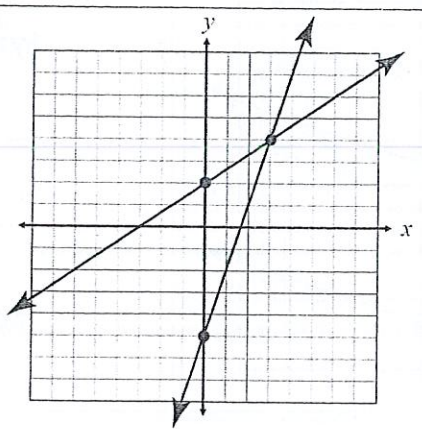
TYPES OF SOLUTIONS

INTERSECTING LINES	PARALLEL LINES	SAME LINE
ONE SOLUTION	**NO SOLUTION**	**INFINITE SOLUTION**

EXAMPLES

Directions: Write the system of equations and identify the solution.

1.



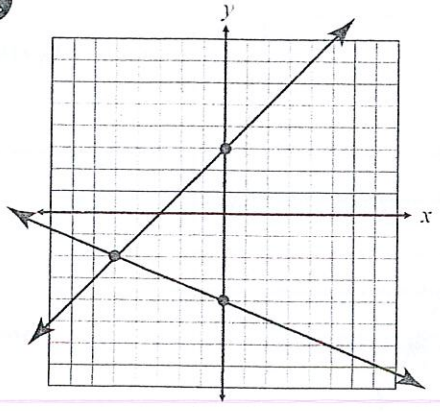
System of Equations:

_____

_____

Solution: _____

2.



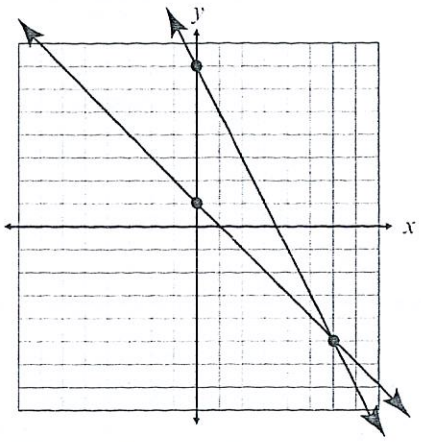
System of Equations:

_____

_____

Solution: _____

3



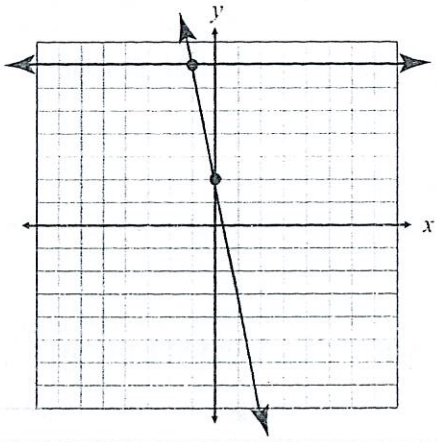
System of Equations:

_____

_____

Solution: _____

4



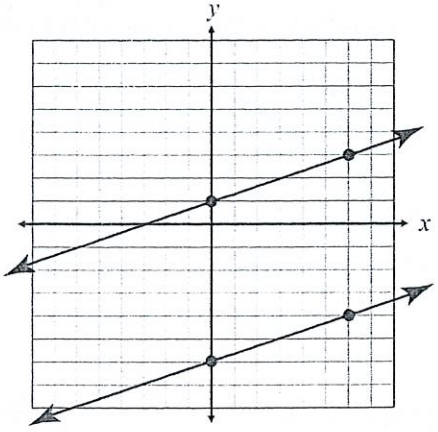
System of Equations:

_____

_____

Solution: _____

5



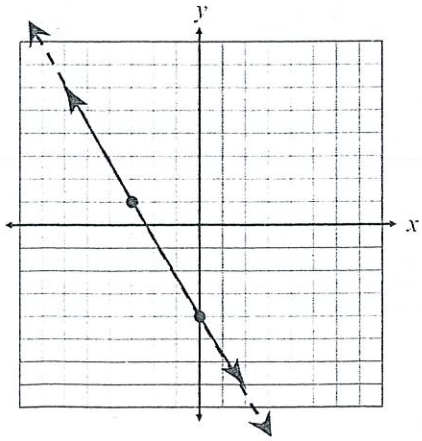
System of Equations:

_____

_____

Solution: _____

6



System of Equations:

_____

_____

Solution: _____

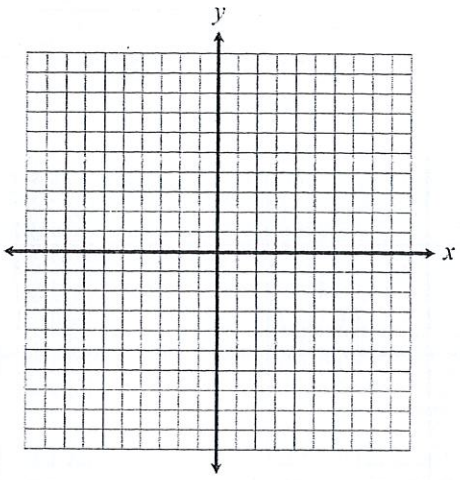
Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples
Solve a System by **GRAPHING**	

Examples

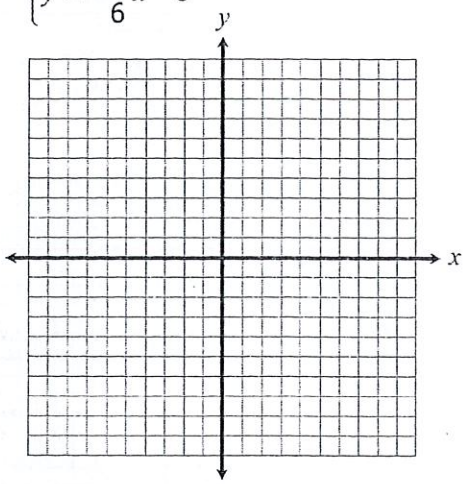
Directions: Solve the system of equations by graphing.

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



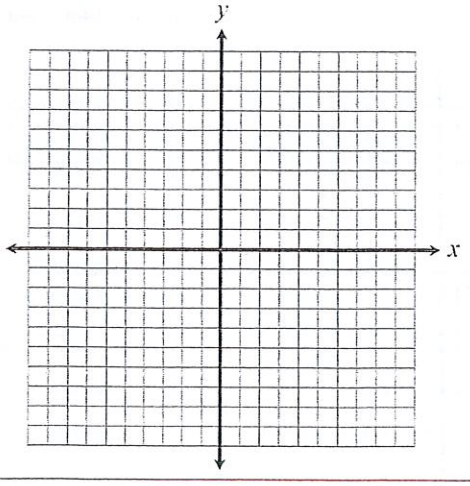
Solution:

2. $\begin{cases} y = \frac{5}{2}x + 8 \\ y = -\frac{1}{6}x - 8 \end{cases}$



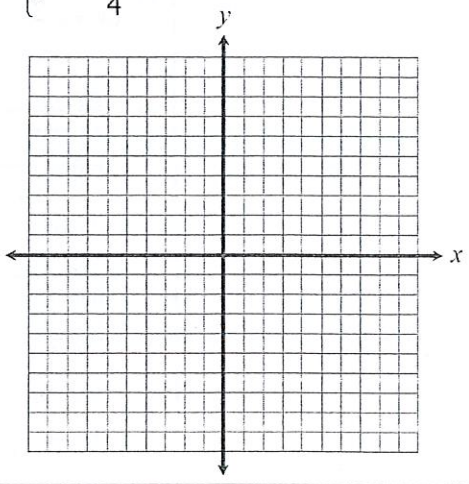
Solution:

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



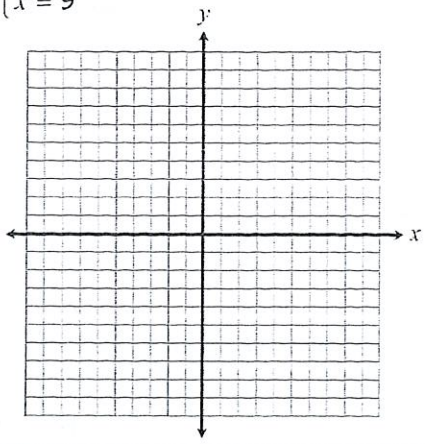
Solution:

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



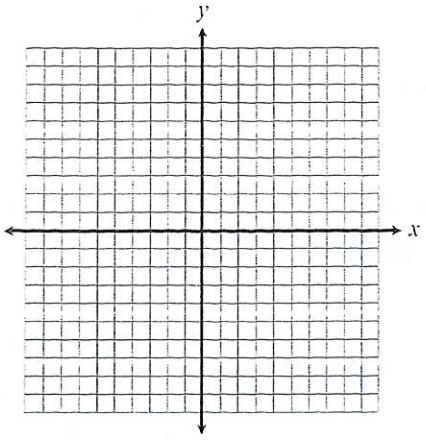
Solution:

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



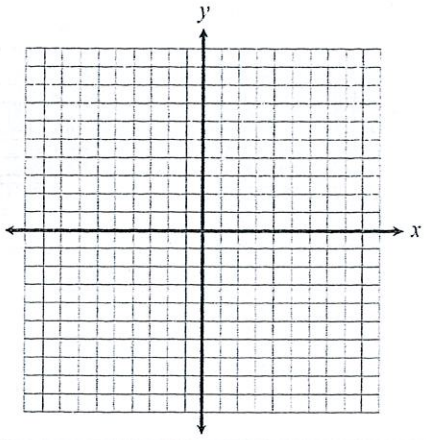
Solution:

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



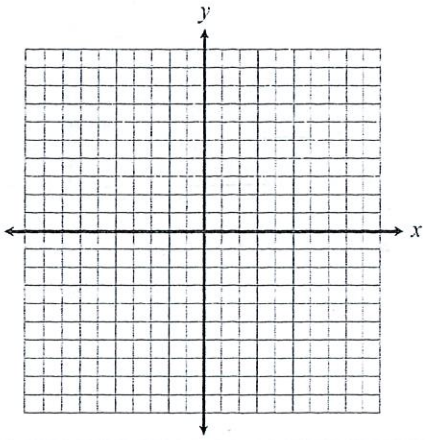
Solution:

7. $\begin{cases} y = -2x + 2 \\ 5x - 2y = 14 \end{cases}$



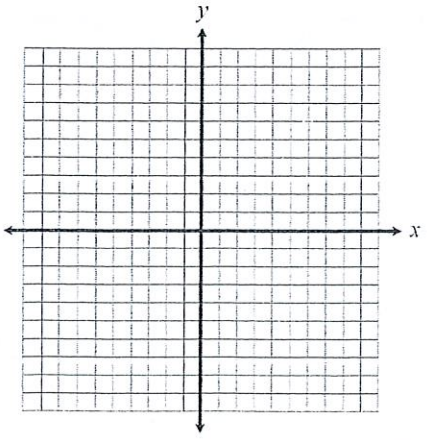
Solution:

8. $\begin{cases} x + 2y = 10 \\ x - 4y = -8 \end{cases}$



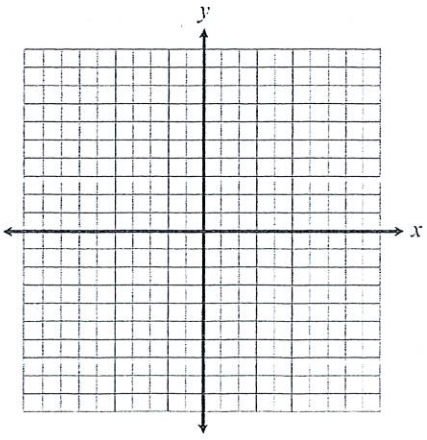
Solution:

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



Solution:

10. $\begin{cases} y = x + 6 \\ 2x - 2y = -12 \end{cases}$



Solution:

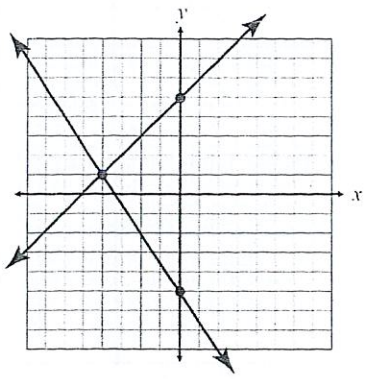
Name: _____ **Unit 6:** Systems of Equations

Date: _____ Per: _____ **Homework 1:** Solving Systems by Graphing

**** This is a 2-page document! ****

Directions: Write the system of equations shown on the graph and identify its solution.

1.

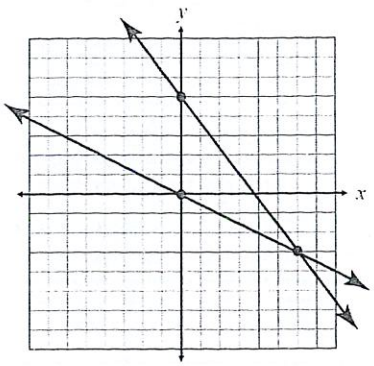


_____

_____

Solution: _____

2.



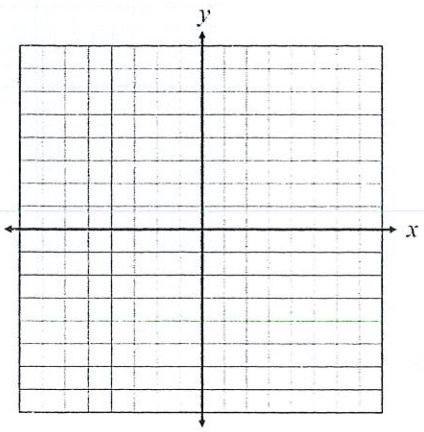
_____

_____

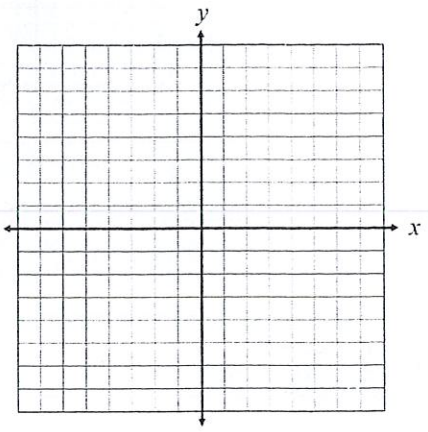
Solution: _____

Directions: Solve each system by graphing. Be sure to clearly give the solution.

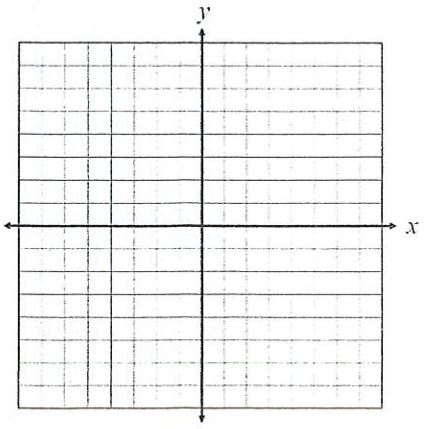
3. $\begin{cases} y = -x - 4 \\ y = 5x + 2 \end{cases}$



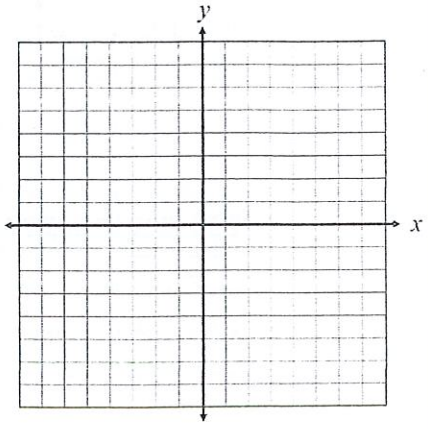
4. $\begin{cases} y = \frac{2}{3}x + 3 \\ y = -x - 7 \end{cases}$



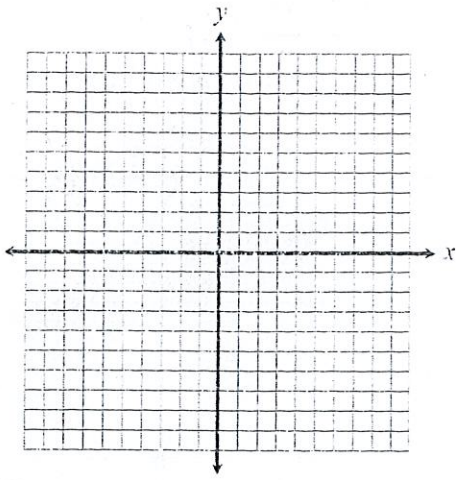
5. $\begin{cases} y = \frac{1}{2}x + 4 \\ y = -\frac{5}{2}x - 2 \end{cases}$



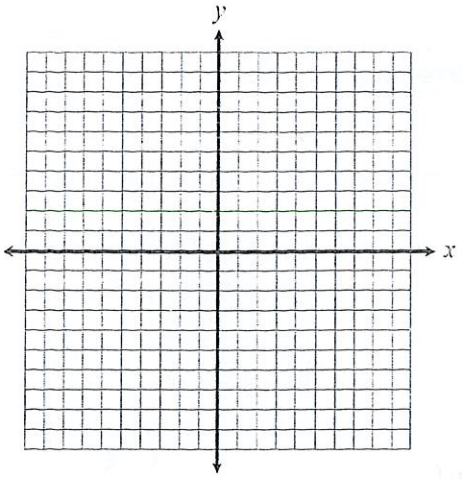
6. $\begin{cases} y = -2x + 7 \\ y = 5 \end{cases}$



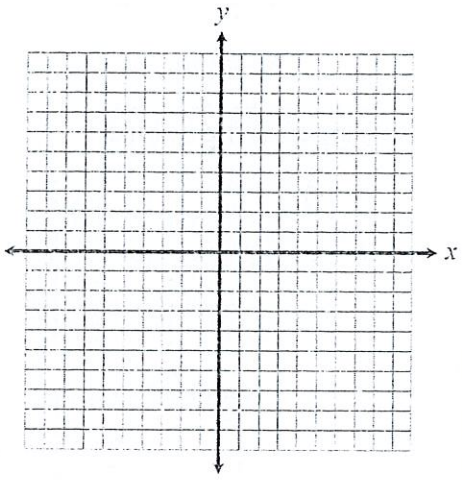
7. $\begin{cases} y = x - 4 \\ y = x - 4 \end{cases}$



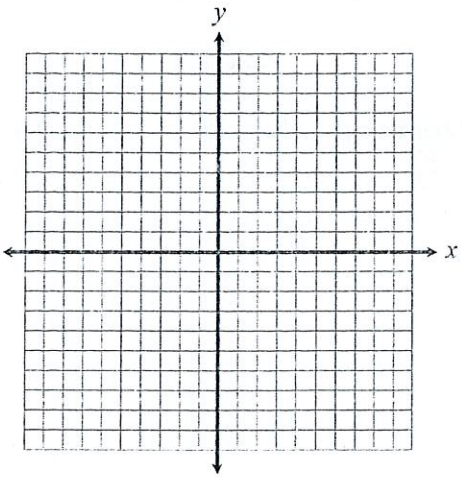
8. $\begin{cases} y = \frac{1}{2}x + 2 \\ y = -\frac{3}{4}x - 3 \end{cases}$



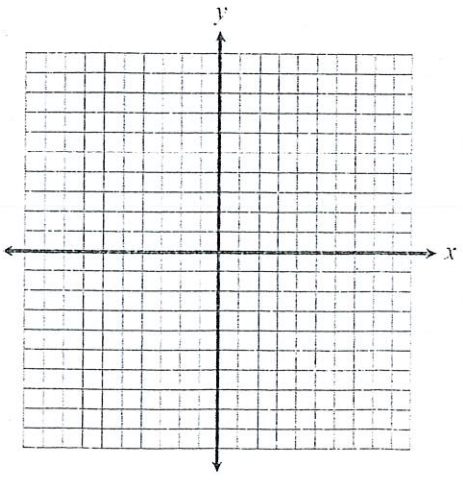
9. $\begin{cases} x + y = 7 \\ 4x - y = 3 \end{cases}$



10. $\begin{cases} 3x + 2y = -18 \\ x + 4y = 4 \end{cases}$



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



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