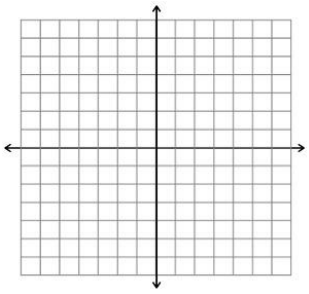
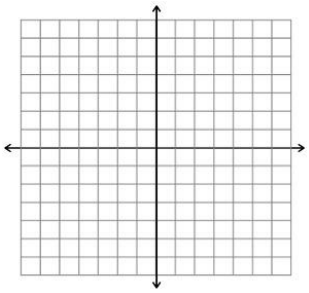
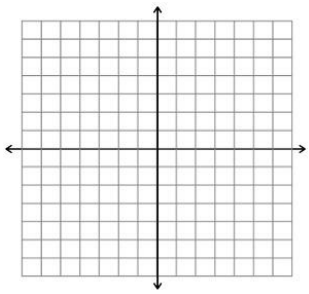
Algebra I
WS 6-1 *Solving Systems by Graphing*

Complete the table: (Notice that some parts have been completed for you.)

Graphic Solution			
Number of Solutions	1 Solution	Infinite Solutions	0 solutions
Algebraic Solution	(x, y)	Infinite	No solution
Type of Solution			

Determine if the ordered pair is a solution to the system.

1. $(3, 3)$;

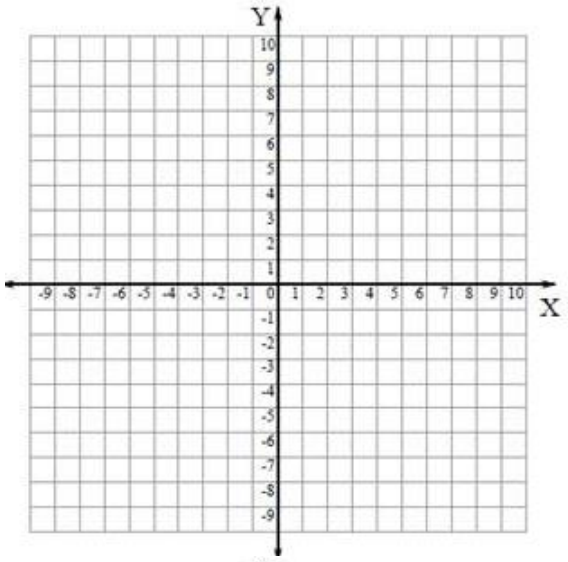
$$\begin{cases} x + 2y = 9 \\ 4x - y = 15 \end{cases}$$

2. $(1, -2)$

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

SOLVE EACH SYSTEM OF EQUATIONS BY GRAPHING

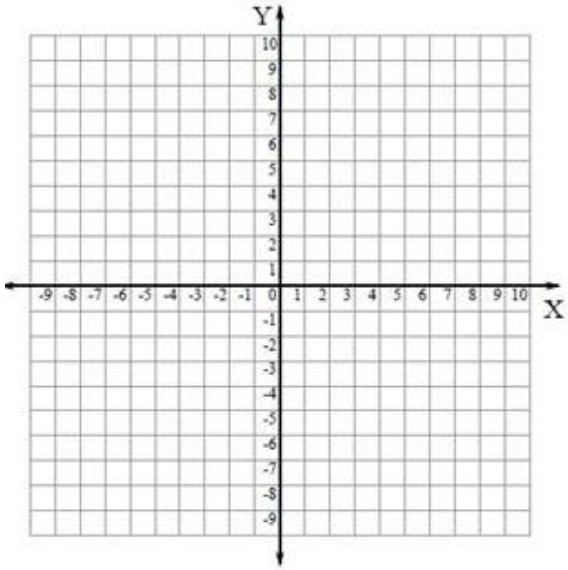
3. $\begin{cases} y = 2x \\ y = -2x + 8 \end{cases}$



Solution:_____

Type of system:_____

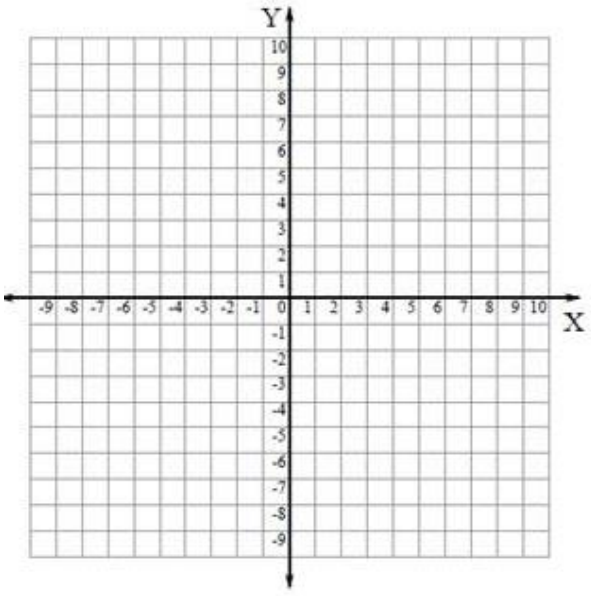
4. $\begin{cases} y = -\frac{1}{2}x + 2 \\ y = \frac{1}{2}x + 6 \end{cases}$



Solution:_____

Type of system:_____

5. $\begin{cases} 2x + 2y = 4 \\ 3x + 3y = 12 \end{cases}$

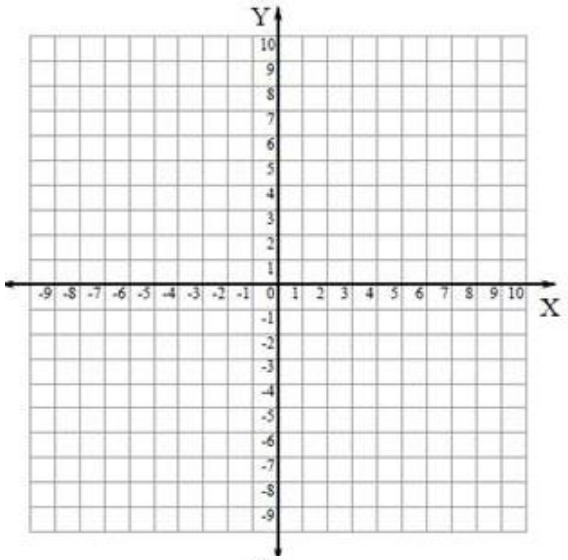


Solution:_____

Type of system:_____

SOLVE EACH SYSTEM OF EQUATIONS BY GRAPHING

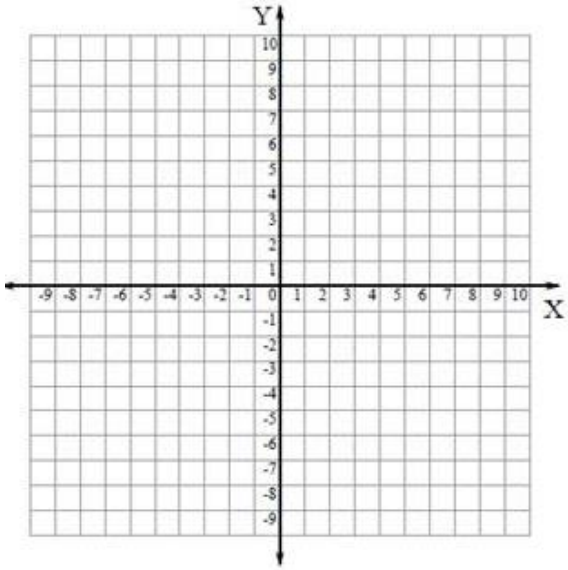
6. $\begin{cases} y = -3x + 2 \\ 12x + 4y = 8 \end{cases}$



Solution:_____

Type of system:_____

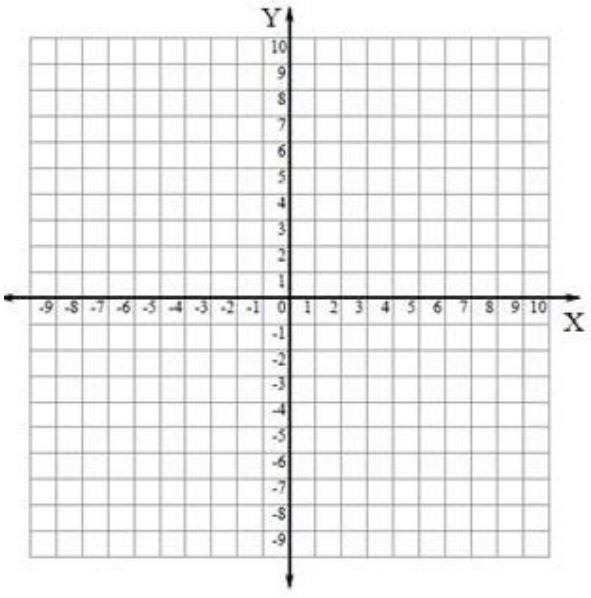
7. $\begin{cases} y = -\frac{1}{3}x - 4 \\ y = \frac{5}{3}x + 2 \end{cases}$



Solution:_____

Type of system:_____

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

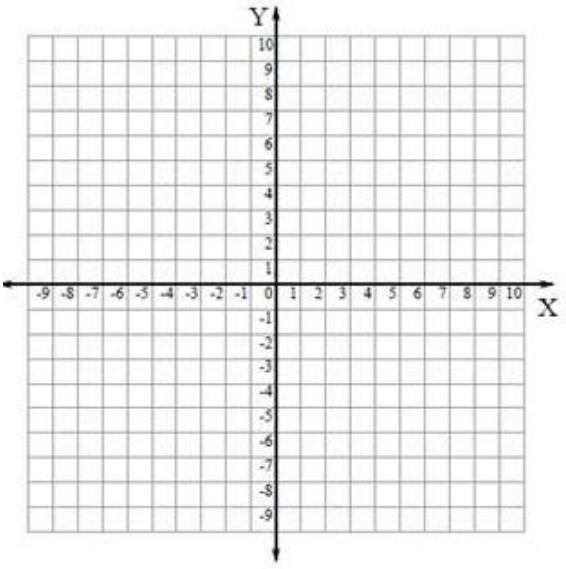


Solution:_____

Type of system:_____

SOLVE EACH SYSTEM OF EQUATIONS BY GRAPHING

9. $\begin{cases} 10x + 2y = -6 \\ y = -5x - 3 \end{cases}$ (hint solve 1st equation for y)



Solution:_____

Type of system:_____

10. Which ordered pair is a solution to the system? $\begin{cases} 2x + 3y = -17 \\ 3x + 2y = -8 \end{cases}$

a. $(2, -7)$ b. $(-4, 2)$ c. $(-2, -1)$ d. $(-\frac{4}{3}, -2)$

11. Jack and Jill are competing to see who can sell the most tickets to a dance.
Jack sold 22 tickets and then sold 30 tickets per day after that.
Jill sold 53 tickets and then sold 20 tickets per day after that.

a. Define two variables.

Let x = _____

Let y = _____

b. Write two equations to represent the number of tickets each person sold.

Jack's tickets sold:_____

Jill's tickets sold:_____