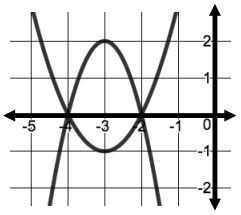
Name: _____

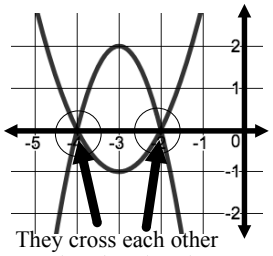
Solving Systems of Linear Equations: Graphing

The solution to a system of equations is the point (or points) where two graphs cross each other. For each graph, circle where they cross, then write the point (or points). That is the solution to the system.

Example

Determine the solution(s) to the system of equations.



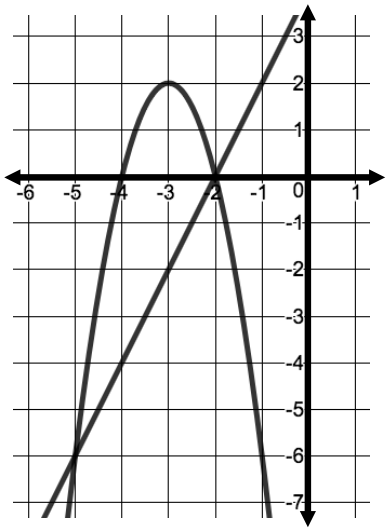


They cross each other at (-4, 0) & (-2, 0)

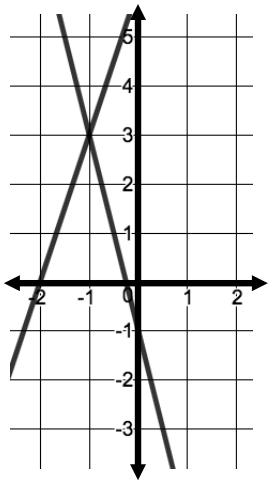
The solutions to the system are:

$\boxed{(4, 0) \text{ \& } (-2, 0)}$

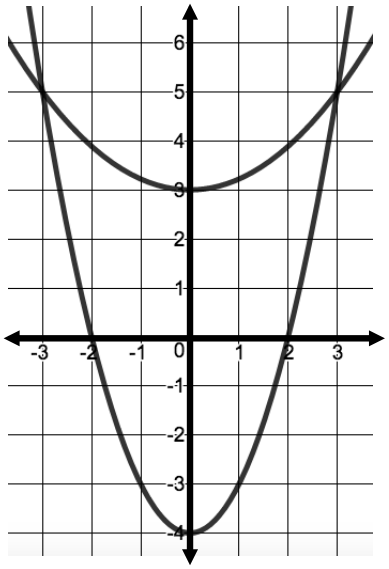
1. Determine the solution(s) to the system of equations.



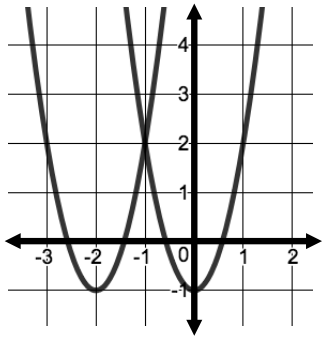
2. Determine the solution(s) to the system of equations.



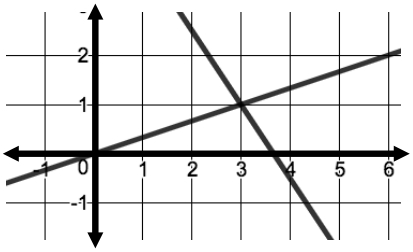
3. Determine the solution(s) to the system of equations.



4. Determine the solution(s) to the system of equations.



5. Determine the solution(s) to the system of equations.



Answers

1. $(-5, -6)$ & $(-2, 0)$	2. $(-1, 3)$	3. $(-3, 5)$ & $(3, 5)$	4. $(-1, 2)$	5. $(3, 1)$

Determine the solution(s) to the system using elimination or substitution.

6. $\begin{cases} -y = -3x + 10 \\ 5y = 2x + 2 \end{cases}$	7. $\begin{cases} -4y = -5x - 18 \\ 4y = -2x - 24 \end{cases}$
8. $\begin{cases} y = 3x + 9 \\ y = -6x - 9 \end{cases}$	9. $\begin{cases} 2y = 8x - 3 \\ -y = -4x - 2 \end{cases}$
10. $\begin{cases} 3y = x - 1 \\ -4y = 2x - 2 \end{cases}$	11. $\begin{cases} y = 3x - 2 \\ 4y = 12x - 8 \end{cases}$

Answers

6. $(4, 2)$	7. $(-6, -3)$	8. $(-2, 3)$	9. No Solution	10. $(1, 0)$	11. Infinitely Many