

Name: _____

Date: _____

Learning Goal 7.1

Solve systems of linear equations graphically.

What is a solution?

Example Is the point $(-1,1)$ a solution to:

$$\begin{aligned} 7x + 6y &= 1 \\ x + 2y &= -3 \end{aligned}$$

Justify your answer.

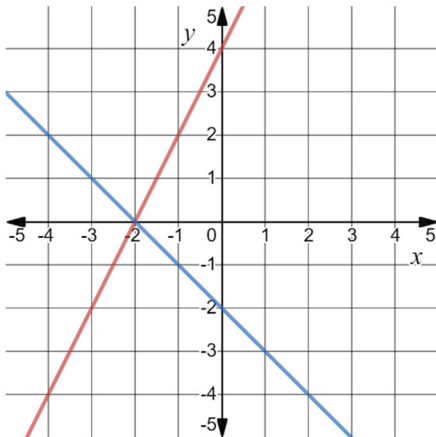
Example Find the solution to each of the following systems:

a.

x	y
-4	0
-2	-2
0	-4
2	-6
4	-8

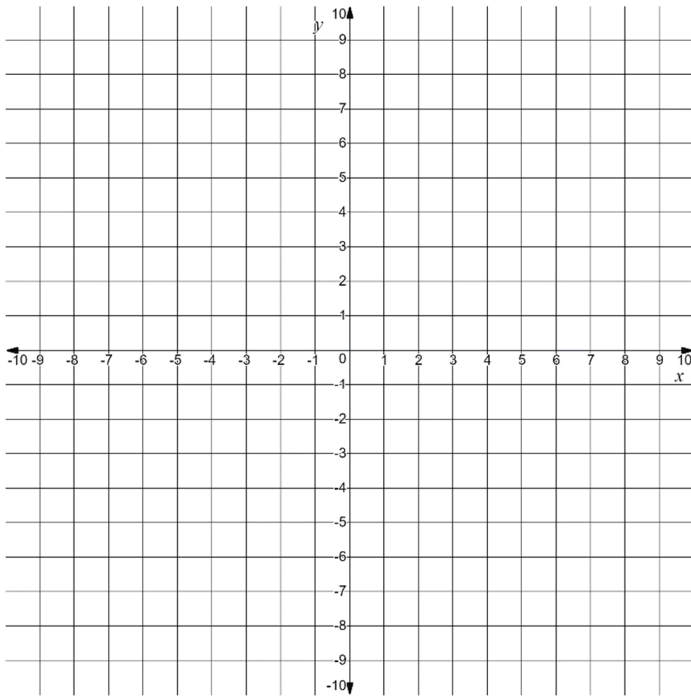
x	y
-2	-14
-1	-12
0	-10
1	-8
2	-6

b.



Example Solve the following system graphically. Check your solution.

$$\begin{aligned}x + y &= -4 \\ 2x - 3y &= 12\end{aligned}$$



Example A school raised \$140 by collecting 2000 cans and glass bottles for recycling. The school received 5¢ for a can and 10¢ for a bottle. How many cans and bottles were returned?