

Terminology

a. Point of Intersection

b. System of Linear Equations

c. Satisfies an equation

d. Solution to a System of Linear Equations

Example For which of the following systems is the point $(-1,1)$ a solution?

a.
$$\begin{aligned} 5x + 6y &= 1 \\ 6x + 2y &= -3 \end{aligned}$$

b.
$$\begin{aligned} 3x + 4y &= 1 \\ 5x - 3y &= -8 \end{aligned}$$

c.
$$\begin{aligned} 3x - 4y &= -6 \\ 3x + 3y &= 1 \end{aligned}$$

d.
$$\begin{aligned} 2x + 3y &= 1 \\ 4x + 6y &= 2 \end{aligned}$$

Example Solve the following systems graphically. Check your solution.

a.
$$\begin{aligned} x + y &= 5 \\ 3x + y &= 3 \end{aligned}$$

b.
$$\begin{aligned} y &= -\frac{3}{2}x + 8 \\ 2x + 4y &= 16 \end{aligned}$$

