

Lesson Summary

A linear equation in two-variables x and y is in standard form if it is of the form $ax + by = c$ for numbers a , b , and c , where a and b are both not zero. The numbers a , b , and c are called constants.

A solution to a linear equation in two variables is the ordered pair (x, y) that makes the given equation true. Solutions can be found by fixing a number for x and solving for y or fixing a number for y and solving for x .

Problem Set

1. Consider the linear equation $x - \frac{3}{2}y = -2$.
 - a. Will you choose to fix values for x or y ? Explain.
 - b. Are there specific numbers that would make your computational work easier? Explain.
 - c. Find five solutions to the linear equation $x - \frac{3}{2}y = -2$, and plot the solutions as points on a coordinate plane.

x	Linear Equation: $x - \frac{3}{2}y = -2$	y

2. Find five solutions for the linear equation $\frac{1}{3}x + y = 12$, and plot the solutions as points on a coordinate plane.
3. Find five solutions for the linear equation $-x + \frac{3}{4}y = -6$, and plot the solutions as points on a coordinate plane.
4. Find five solutions for the linear equation $2x + y = 5$, and plot the solutions as points on a coordinate plane.
5. Find five solutions for the linear equation $3x - 5y = 15$, and plot the solutions as points on a coordinate plane.