NAME _____ DATE _____

Study Guide

Student Edition
Pages 356–361

Graphing Linear Equations

There are three methods you can use for graphing equations. You can find two ordered pairs that satisfy the equation, the x- and y-intercepts, or the slope and y-intercept.

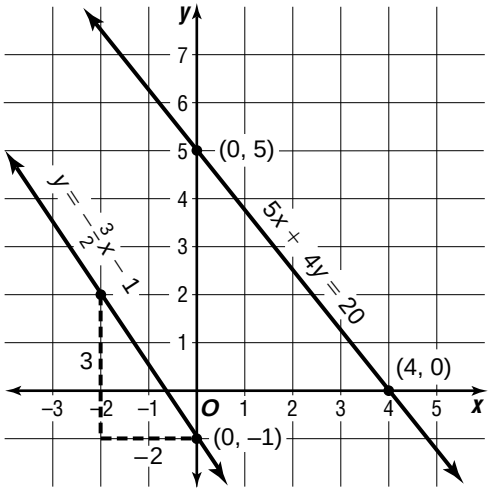
Example 1: Graph $5x + 4y = 20$ by using the x- and y-intercepts.

The equation is in standard form $Ax + By = C$.

The x-intercept is $\frac{C}{A}$, or 5.

The y-intercept is $\frac{C}{B}$, or 4.

Thus, the graph contains the points (4, 0) and (0, 5).

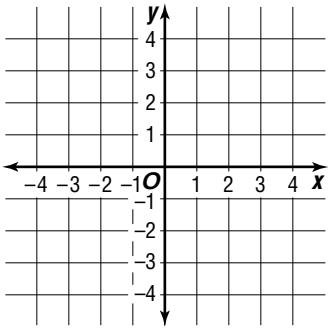


Example 2: Graph $y = -\frac{3}{2}x - 1$ by using the slope and y-intercept.

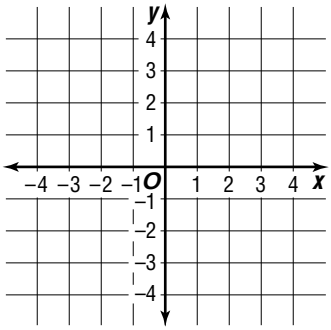
The y-intercept is -1, the slope $-\frac{3}{2}$.

Graph each equation by using the x- and y-intercepts.

1. $-3x + 2y = 6$

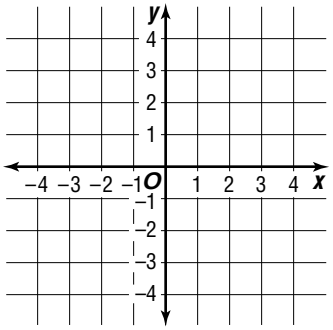


2. $3y + x = 3$



Graph each equation by using the slope and y-intercept.

3. $y = \frac{1}{3}x + 2$



4. $y = \frac{1}{2}x + \frac{3}{4}$