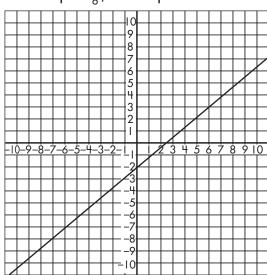
Lesson 3.2 Graphing Linear Equations Using Slope

When given the slope and intercept of any straight line, a linear equation can be created using the slope-intercept form.

Slope:
$$\frac{5}{6}$$
; Intercept: -2



- **Step I:** Use the equation y = mx + b, where m equals slope and b is the y-intercept.
- **Step 2:** Substitute the known quantities for the slope and the *y*-intercept.

$$y = \frac{5}{6}x - 2$$

Use slope-intercept form to write equations given the conditions below.

C

1. slope: $\frac{4}{3}$; intercept: 3

b

slope: -2; intercept: 4

C

slope: $-\frac{1}{2}$; intercept: 7

- **2.** slope: 3; intercept: -5
- slope: $\frac{2}{5}$; intercept: 0
- slope: $-\frac{3}{4}$; intercept: -2

- 3. slope: -4; intercept: 6
- slope: $\frac{5}{2}$; intercept: -3
- slope: $\frac{1}{2}$; intercept: 1