Slope-Intercept Form of a Line (page 1)

Nonproportional linear relationships can be written in the form y = mx + b, where *m* is the slope and *b* is the *y*-intercept.

Examples:

- 1. State the slope and the *y*-intercept of the graph of the equation $y = \frac{3}{4}x + 2$.
- 2. State the slope and the y-intercept of the graph of the equation y = -2x 7.
- 3. Write an equation of a line in slope-intercept form with a slope of -3 and a *y*-intercept 2.
- 4. Write an equation of a line in slope-intercept form for each graph shown.



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Slope is
$$-2$$
 and y-intercept is -7

Slope is $\frac{3}{4}$ and y-intercept is 2.

Slope is -2 and y-intercept is -7

y = -3x + 2



y = -3x + 2

Slope-Intercept Form of a Line (page 2)

State the slope and the *y*-intercept for the graph of each equation.

1.
$$y = 3x - 7$$
 2. $y = \frac{2}{3}x + 4$ **3.** $y = -\frac{2}{5}x - 4$

Write an equation of a line in slope-intercept from with the given slope.

4. Slope: $-\frac{2}{3}$; y-intercept: 5 **5.** Slope: $\frac{5}{3}$; y-intercept: -1 **6.** Slope: $-\frac{2}{3}$; y-intercept: 12

Write an equation in slope-intercept form for each graph shown.



Slope-Intercept Form of a Line (page 2)

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Write an equation in slope-intercept form for each graph shown.

