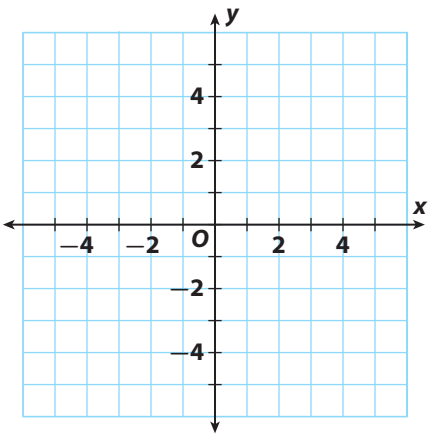
Guided Practice

Graph each equation using the slope and the *y*-intercept. (Example 1)

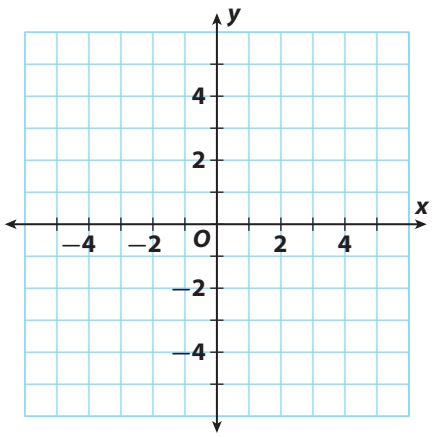
1. $y = \frac{1}{2}x - 3$

slope = ____ *y*-intercept = ____



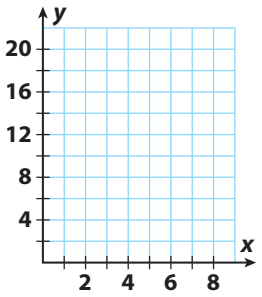
2. $y = -3x + 2$

slope = ____ *y*-intercept = ____



3. A friend gives you two baseball cards for your birthday. Afterward, you begin collecting them. You buy the same number of cards once each week. The equation $y = 4x + 2$ describes the number of cards, *y*, you have after *x* weeks. (Example 2)

a. Find and interpret the slope and the *y*-intercept of the line that represents this situation. Graph $y = 4x + 2$. Include axis labels.



b. Discuss which points on the line do not make sense in this situation. Then plot three more points on the line that do make sense.

ESSENTIAL QUESTION CHECK-IN

4. Why might someone choose to use the *y*-intercept and the slope to graph a line?