13.4: Graphing Linear Equations in Slope-Intercept Form

x-intercept: where the line of a graph crosses the x-axis; occurs when y = 0

y-intercept: where the line of a graph crosses the y-axis; occurs when x = 0

slope-intercept form: a linear equation written in the form y = mx + b, where m is the slope and b is the

 y-intercept

Match the equation with its graph. Identify the slope
and *y*-intercept.

 1. 

 2. 

 3. 

Find the slope and the *y*-intercept of the graph of the linear equation.

 4.  5. 

 6.  7. 

 8.  9. 

 10. The depreciated value *y* (in dollars) of a business car after *x* years is

 

1. Graph the equation.
2. Interpret the slope.
3. Interpret the *y*-intercept.
4. Interpret the *x*-intercept.

Graph the linear equation. Identify the *x*-intercept. Use a graphing calculator to check your answer.

 11.  12. 

 13.  14. 

 15. The amount of fertilizer *y* (in cups) that is needed for *x* square feet of grass is 

 a. Graph the equation.

 b. Interpret the slope.