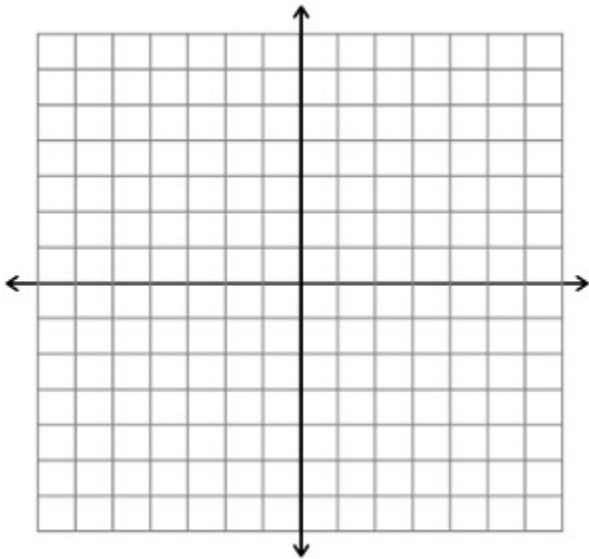


## Sec. 6.5 – Slope-Point Form of the Equation for a Linear Function

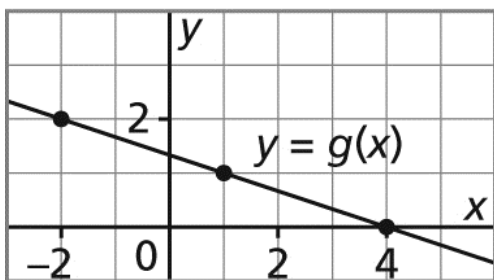
1. a) Describe the graph of the linear function with this equation:

$$y + 1 = -\frac{1}{2}(x - 2)$$

b) Graph the equation.



2. a) Write an equation in slope-point form for this line.



b) Write the equation in part a in slope-intercept form. What is the  $y$ -intercept of this line?

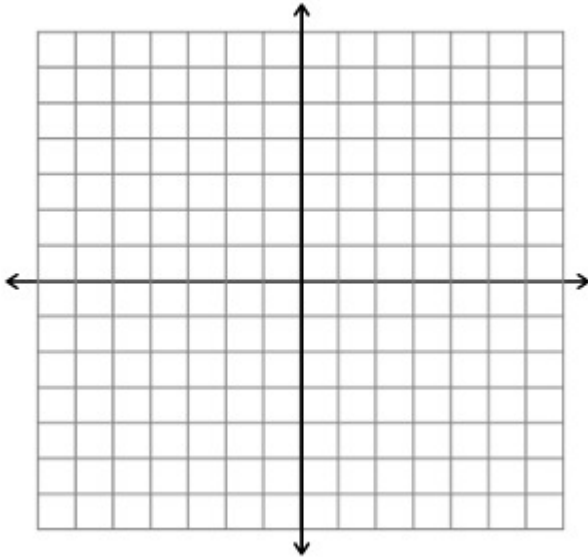
**3.** A temperature in degrees Celsius,  $c$ , is a linear function of the temperature in degrees Fahrenheit,  $f$ . The boiling point of water is  $100^{\circ}\text{C}$  and  $212^{\circ}\text{F}$ . The freezing point of water is  $0^{\circ}\text{C}$  and  $32^{\circ}\text{F}$ .

**a)** Write a linear equation to represent this function.

**b)** Use the equation to determine the temperature in degrees Celsius at which iron melts,  $2795^{\circ}\text{F}$ .

4. Write an equation for the line that passes through  $S(2, -3)$  and is:

a) parallel to the line  $y = 3x + 5$



b) perpendicular to the line  $y = 3x + 5$