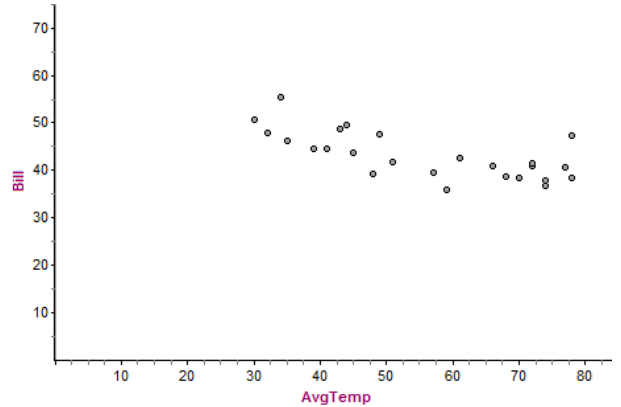


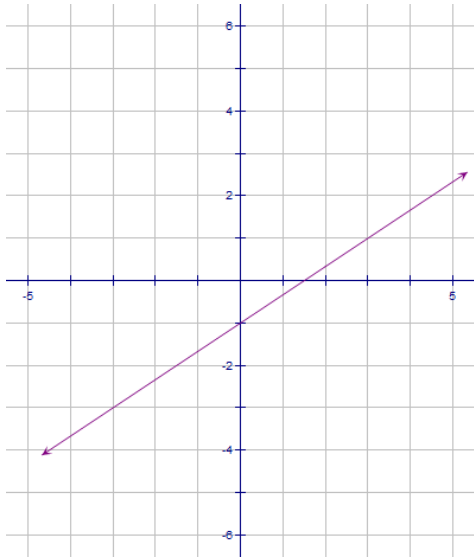
Review 4.2

1) The graph to the right shows the relationship between the average monthly temperature (in degrees Fahrenheit) and the cost of the monthly electric bill (in dollars).



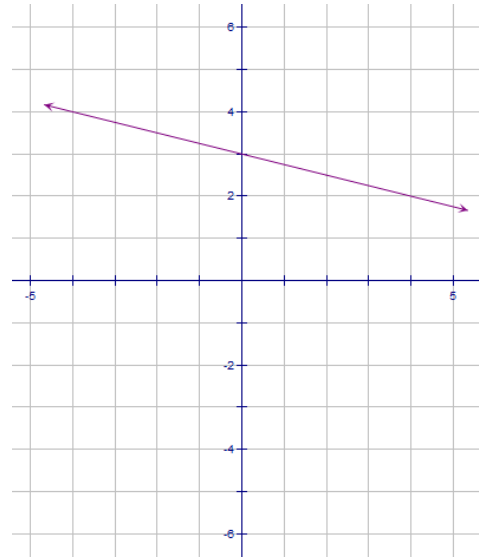
- a. Draw a line of fit on the graph at the right. Make sure that it follows the direction of the points, that there are about as many points above your line as below your line, and that it crosses the  $y$ -axis.
- b. Write the coordinates of two points *on the line* that you have drawn.
- c. Find the slope of your line using the points chosen in part b. Include the units.
- d. Explain what the slope means in the context of the problem...what does it have to do with the cost of the bill and the temperature?
- e. Find the  $y$ -intercept of the line of fit by looking at your graph.
- f. Explain what the  $y$ -intercept if in the context of the problem.
- g. Write the equation of the line in  $y = a + bx$  form.
- h. Using your equation, find the expected cost of the electric bill if the average monthly temperature is 20 degrees. *Show your work properly.*
- i. Using your equation, find the average monthly temperature if the monthly bill is \$60.

2) For each of the following graphs, find the slope, the  $y$ -intercept, and then write the equation of the line in intercept form.



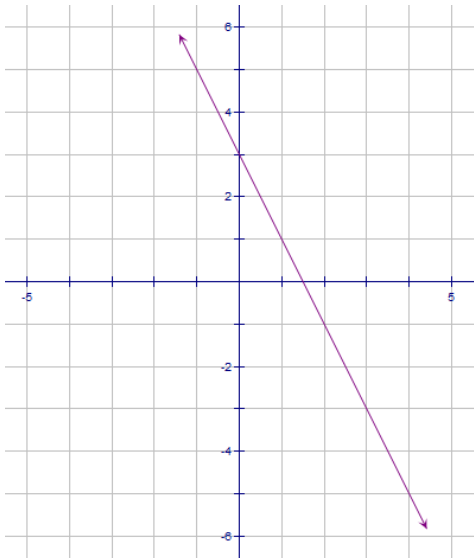
Slope = \_\_\_\_\_  $y$ -intercept = \_\_\_\_\_

Equation \_\_\_\_\_



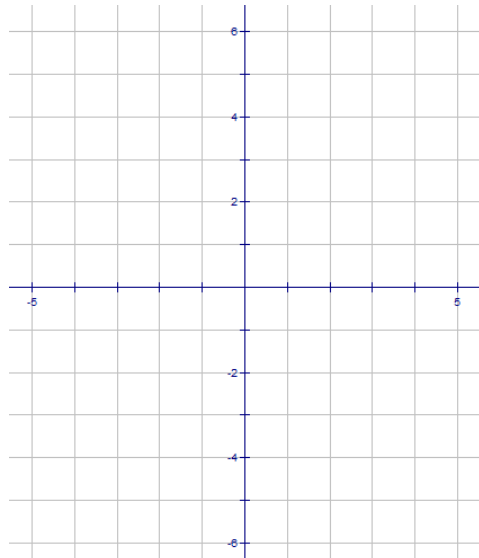
Slope = \_\_\_\_\_  $y$ -intercept = \_\_\_\_\_

Equation \_\_\_\_\_



Slope = \_\_\_\_\_  $y$ -intercept = \_\_\_\_\_

Equation \_\_\_\_\_



On the axes above, graph the line  $y = -3 + \frac{5}{2}x$

