2.3 Practice A

In Exercises 1 and 2, use the graph to write an equation of the line and interpret the slope.



3. Two car washes charge a basic fee plus a fee based on the number of extras that are chosen. The table below shows the total costs for different car washes at Bubbles Car Wash. The total cost y (in dollars) for a car wash with x extras at Soapy Car Wash is represented by the equation y = x + 9. Which car wash charges more for the basic fee? How many extras must be chosen for the total costs to be the same?

Number of extras, <i>x</i>	2	4	6	8
Total cost, <i>y</i>	9	12	15	18

In Exercises 4 and 5, determine whether the data show a linear relationship. If so, write an equation of a line of fit. Estimate y when x = 15 and explain its meaning in the context of the situation.

4.	Weeks, <i>x</i>	3	6	10	12	16
	Height of basil plant (inches), y	1	2	5	9	15

5.	Minutes, <i>x</i>	6	10	14	20	24
	Cars washed, y	3	5	7	10	12

6. A set of data points has a correlation coefficient r = -0.86. Your friend claims that because the correlation coefficient is close to -1, it is reasonable to use the line of best fit to make predictions. Is your friend correct? Explain your reasoning.