

1.3 Notetaking with Vocabulary (continued)

Finding a Line of Fit

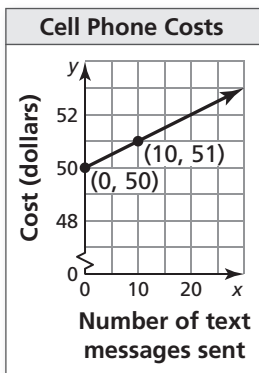
- Step 1** Create a scatter plot of the data.
- Step 2** Sketch the line that most closely appears to follow the trend given by the data points. There should be about as many points above the line as below it.
- Step 3** Choose two points on the line and estimate the coordinates of each point. These points do not have to be original data points.
- Step 4** Write an equation of the line that passes through the two points from Step 3. This equation is a model for the data.

Notes:

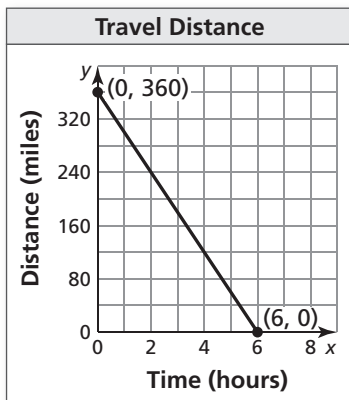
Extra Practice

In Exercises 1–3, use the graph to write an equation of the line and interpret the slope.

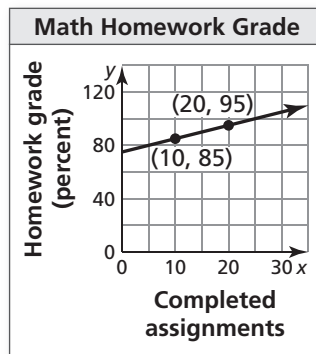
1.



2.



3.



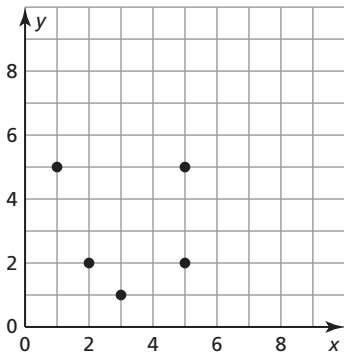
1.3 Notetaking with Vocabulary (continued)

4. The cost of parking in a parking garage in Chicago is represented by the equation $y = 15x + 20$ where y is the total cost (in dollars) and x is the time (in hours). The table shows the total cost to park in a parking garage in Denver. Which city's parking garage charges more per hour and by how much more? After how many hours would parking in both cities cost the same?

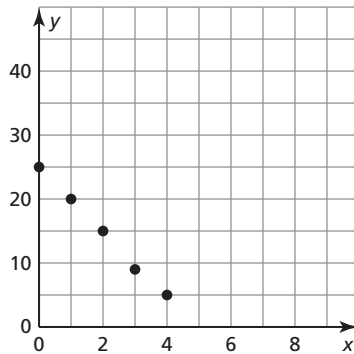
| | | | | |
|------------------------------|----|----|----|----|
| Hours, x | 2 | 3 | 4 | 5 |
| Cost, y | 43 | 51 | 59 | 67 |

In Exercises 5–7, use the *linear regression* feature on a graphing calculator to find an equation of the line of best fit for the data. Find and interpret the correlation coefficient.

5.



6.



7.

