

Chapter 1 Ratios and Proportional Reasoning

Lesson 1-8 Slope

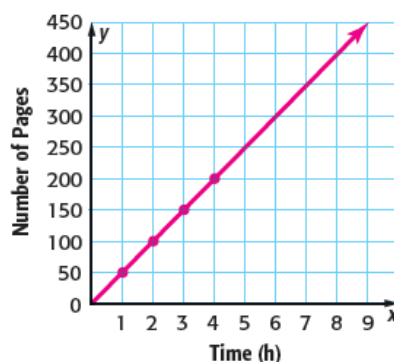
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- 1 The table shows the number of pages Adriano read in x minutes. Graph the data. Then find the slope of the line. Explain what the slope represents.

Time (h)	1	2	3	4
Number of pages	50	100	150	200

The slope represents the constant rate of change, $\frac{50}{1}$.

Adriano reads 50 pages per hour.



- 3 The graph shows the average speed of two cars on the highway.

- a. What does (2, 120) represent?

The point (2, 120) represents the fact that Car A had traveled 120 miles in 2 hours.

- b. What does (1.5, 67.5) represent?

The point (1.5, 67.5) represents the fact that Car B had traveled 67.5 miles in 1.5 hours.

- c. What does the ratio of the y-coordinate to the x-coordinate for each pair of points on the graph represent.

The ratio of the y-coordinate to the x-coordinate for each pair of points represents the speed of each vehicle at that point.

- d. What does the slope of each line represent?

The slope of each line represents the speed of each vehicle.

- e. Which car is traveling faster? How can you tell from the graph?

Car A is traveling faster. Since its slope is steeper, and its graph is rising more rapidly, its speed is greater.

