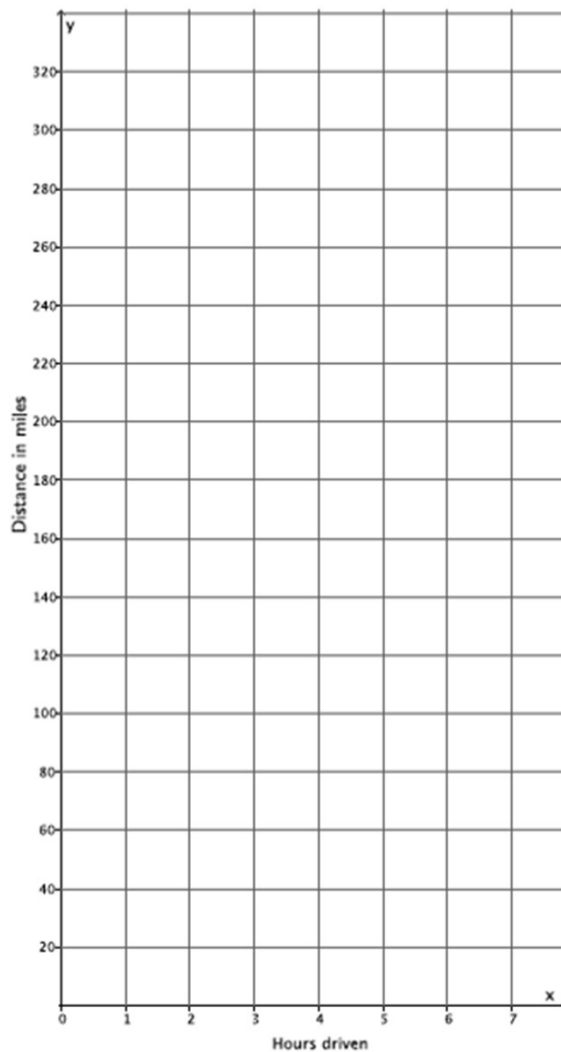# Slope from Equation

1. A group of friends are on a road trip. After 120 miles, they stop to eat lunch. They continue their trip and drive at a constant rate of 50 miles per hour.

a) Let y represent the total distance traveled, and let x represent the number of hours driven after lunch. Write an equation to represent the total number of miles driven that day.

b) Identify the slope and the y-intercept point. What do these numbers represent?

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a) Let y represent the total distance traveled, and let x represent the number of hours driven after lunch. Write an equation to represent the total number of miles driven that day.

$$y = 50x + 120$$

b) Identify the slope and the y-intercept point. What do these numbers represent?

The slope is 50 and represents the rate of driving. The y-intercept point is 120 and represents the number of miles they had already driven before driving at the given constant rate.

c) Graph the equation on a coordinate plane.