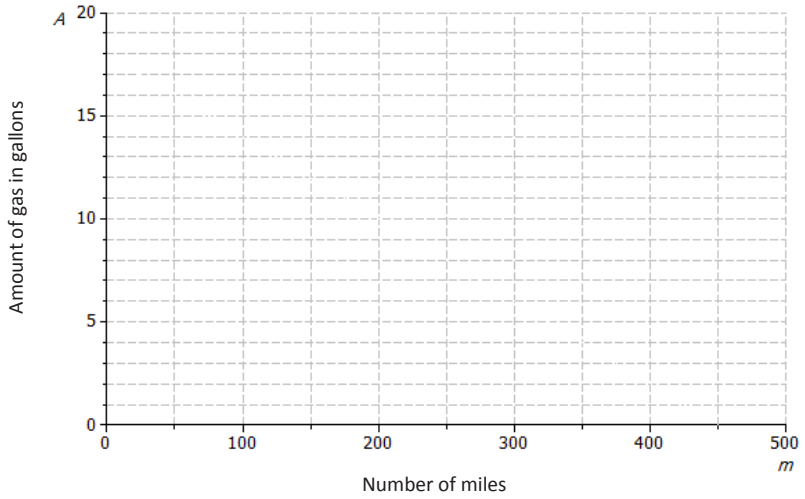
Name _____ Date_____

Lesson 3: Representations of a Line

Exit Ticket

1. A car starts a journey with 18 gallons of fuel. The car will consume 0.04 gallons for every mile driven. Let A represent the amount of gas in the tank (in gallons) and m represent the number of miles driven.



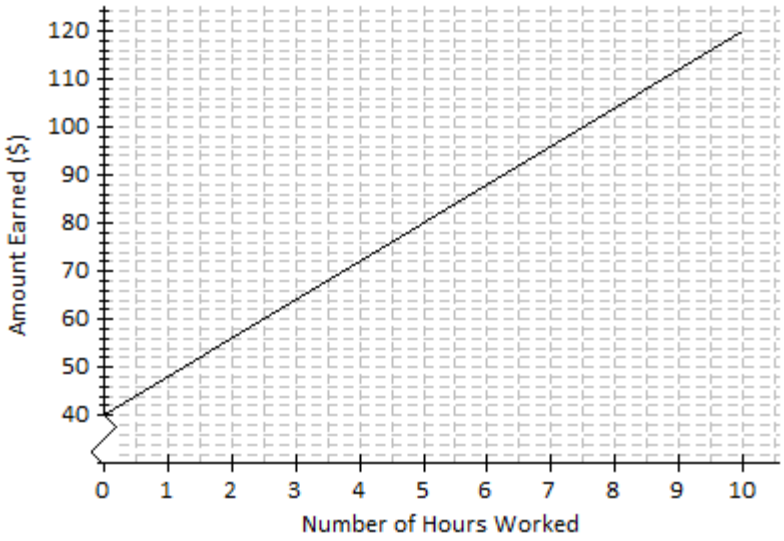
   a. How much gas is in the tank if 0 miles have been driven? How would this be represented on the axes above?

   b. What is the rate of change that relates the amount of gas in the tank to the number of miles driven? Explain what it means within the context of the problem.

   c. On the axes above, graph the line that relates A to m.

   d. Write the linear function that models the relationship between the number of miles driven and the amount of gas in the tank.

2. Andrew works in a restaurant. The graph below shows the relationship between the amount Andrew earns and the number of hours he works.



a. If Andrew works for 7 hours, approximately how much does he earn?

b. Estimate how long Andrew has to work in order to earn $64?

c. What is the rate of change of the function given by the graph? Interpret the value within the context of the problem.