Name _____

3-1A Lesson Master

REPRESENTATIONS Objective E

1. Suppose you are hiking up a large mountain. Your initial elevation is 300 ft above sea level. For every hour you hike your elevation increases by 350 ft.

   a. Write an equation relating your elevation to the number of hours you have hiked.   _____

   b. Complete the table at the right.

Hours hiked	Elevation
0	
1	
2	
3	
4	
5	

   c. What is your elevation after hiking for 4 hours?   _____

   d. If you were to graph the relationship between hours hiked and elevation, would your graph be discrete or continuous?   _____
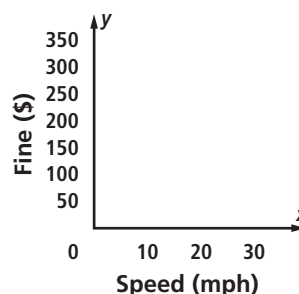
2. Suppose a judge decided to fine speeders $50 plus $10 for every mile per hour they were driving in excess of the highway speed limit.

   a. Write an equation relating the excess speed of the offenders to the fine they incur.   _____

   b. Complete the table below.

Excess Speed (mph)	Fine ($)
5	
10	
15	
20	
25	
30	

   c. Plot fine vs. speed on the grid below.

   d. How much over the speed limit was Jared driving if he received a fine of $250? Label this point on the grid in Part c.   _____