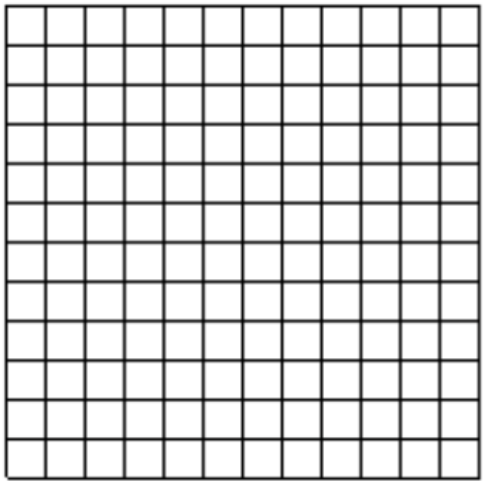
Math 2
Inverse Variation

1) The time it takes to finish a race is inversely related to the speed that the race is completed. Fill in the table below showing how much time it takes to finish a 400-mile race given the speeds.

a. Finish the table (D = rt)

mph	40	50	60	70	80	90	100	110	120	130	140
hours											

b. Graph



c. What happens to the time as the mph increases? Is it consistant?

d. Using the table, mult the hours x mph. What number do you get each time you multiply no matter what values you pick?

e. Which of the following rules matches the graph and table?

s = t/400 t = 400/s 400 = st s = 400t

f. Looking at the table, what happens to the corresponding y value when any x value is multiplied by 2?

a) the y value is also multiplied by 2 b) the y value is divided by 2
c) nothing, there is no pattern d) the y value is increased by 2

g. What will happen to the corresponding y value when any x value is multiplied by 3?

a) the y value is also increased by 3 b) nothing, there is no pattern
c) the y value is divided by 3 d) the y value is multiplied by 3