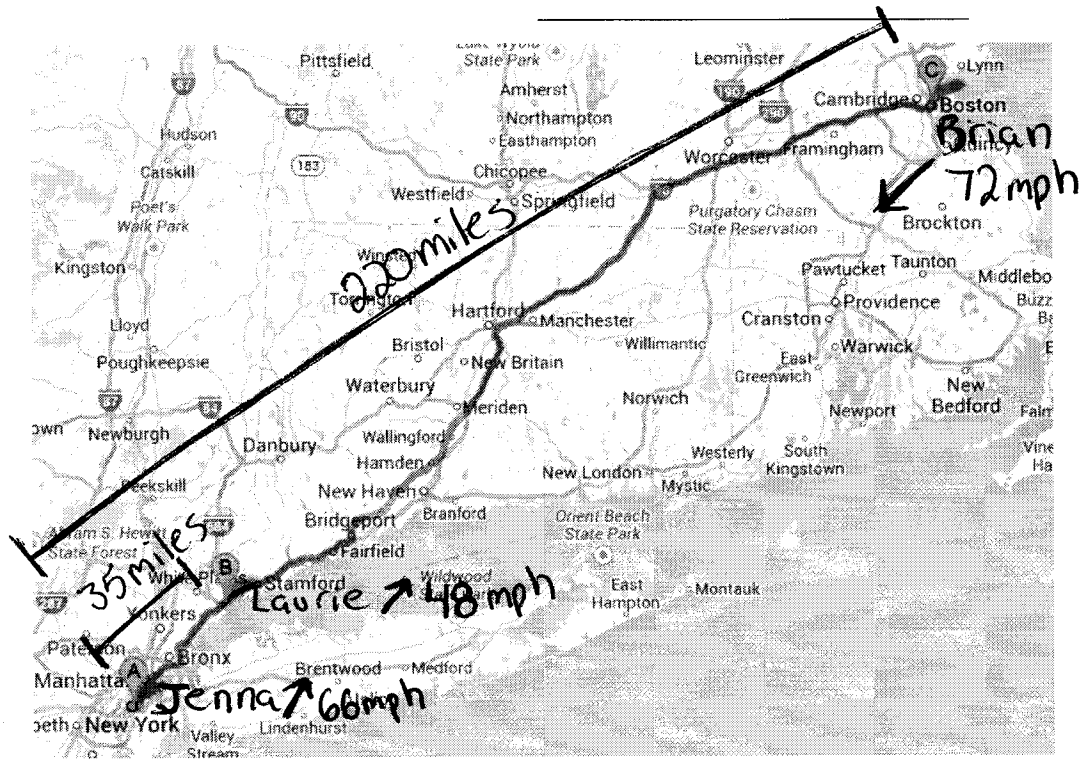
Driving Sequences Names:_____Period:_____



Jenna, Laurie and Brian were all traveling to visit family for Thanksgiving this weekend and realized that they all crossed paths without realizing it. They're wondering exactly when and where they crossed paths along their journey. They all left at 9am: Jenna left from New York (A) and drove at a steady 66mph, Laurie left from Port Chester, NY (B) but drove like a grandma at only 48mph, and Brian left from Boston speeding down the highway at 72mph. Laurie and Jenna were heading northeast to Boston. Brian was heading southwest to New York City. Find exactly what time and place each of the three crossed paths with each other.

- Port Chester, NY is about 35 miles from New York, NY.
- Boston, MA is about 220 miles from New York, NY.
  Use these estimated distances for your calculations in the problem.

Step 1: Calculate the speed of each person in miles per minute.

Jenna: $\frac{66mi}{1hour} \cdot \frac{1hour}{60min} = \frac{66mi}{60min} = \frac{11mi}{10min} = 1.1mi/min$

Laurie: $\frac{48mi}{1hour} = \frac{48mi}{60min} = \frac{4(12)mi}{5(12)min} = \frac{4mi}{5min} = .8mi/min$

Brian: 72mph ÷ 60 = 1.2 miles per minute

Step 2: Record each person's distance from New York, NY at 9:00 am in the table below.
Step 3: Use your calculations in step 1 to continue filling in each person's distance from New York, NY at the indicated times.
Step 4: Continue using the table to calculate each person's location at other

Distance from New York, NY

Time	Jenna 1.1mi/min	Laurie .8/min	Brian 1.2mi/min
09:00 AM	0	35	220
09:01 AM	0+1.1= [redacted] 1.1miles	35+0.8= 35.8	220-1.2=218.8
09:02 AM			
09:05 AM			
09:10 AM	0+11 = 11 miles	35+8 = 43	220-12 = 208
09:20 AM			
09:40 AM			
10:00 AM		35+48 =	