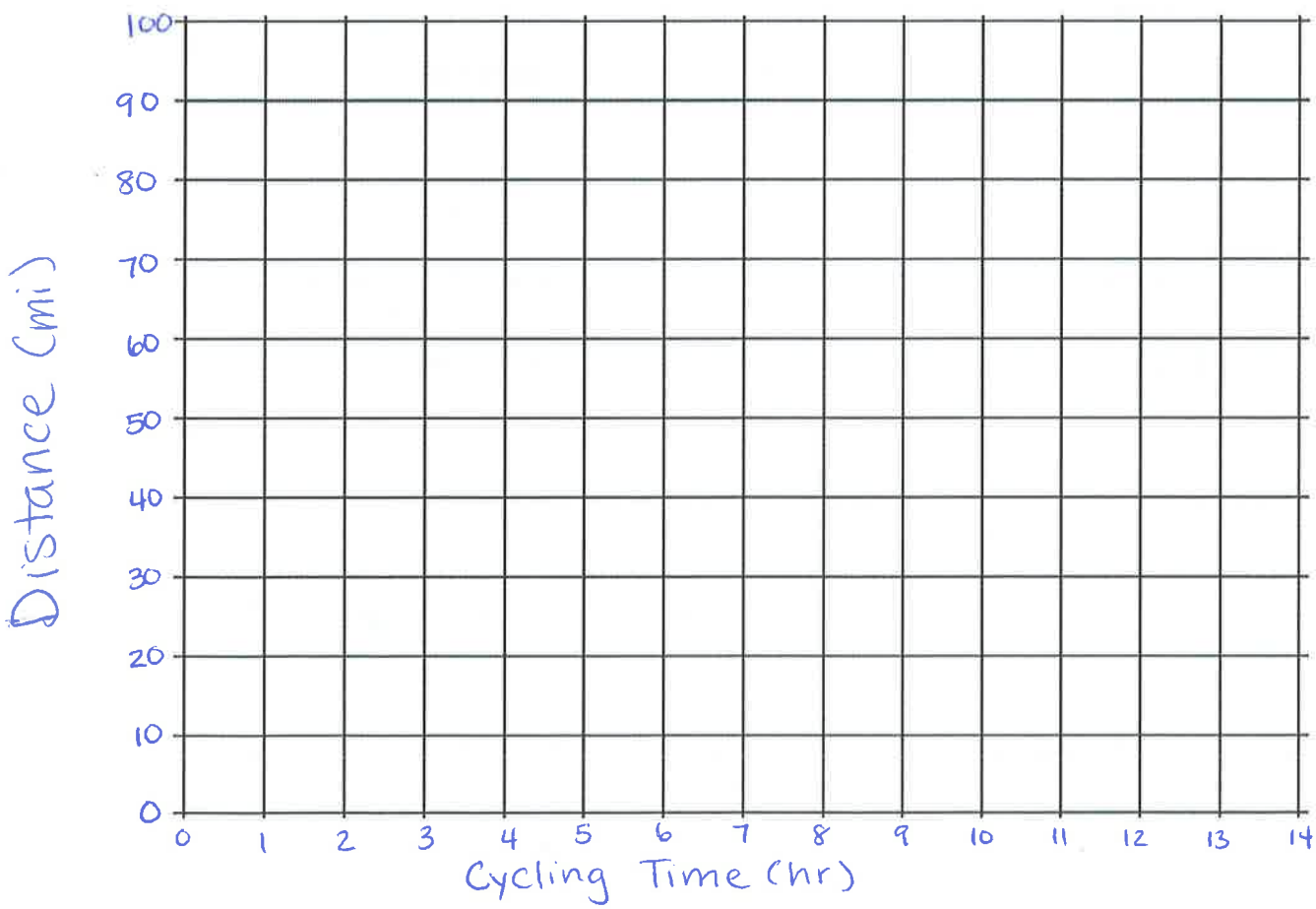
Name: _____ Periods: _____

**MSA 1.2 Homework P. 16 # 3**

**(1)** Fill in the chart.

| Cycling Time (hours) | Distance (miles) | | |
|---|---|---|---|
| | Jose | Mario | Melanie |
| 0 | 0 | 0 | 0 |
| 1 | 5 | 7 | 9 |
| 2 | 10 | 14 | 18 |
| 3 | 15 | 21 | 27 |
| 7 | | | |
| RATE (mi/hr) | | | |

**(2)** Graph the data for all 3 riders on this graph (use different colors).




**(3)** Use the **graph** to find:

**(a)** Distance traveled in $6\frac{1}{2}$ hours for each rider:

Jose: Mario: Melanie:

Continue to use the graph to answer (b) and (c)

**(b)** How long it takes each rider to travel 70 miles:

Jose: Mario: Melanie:

**(c)** How does the rate at which each person rides affect the graph?

**(4)** **(a)** Write an equation to find the distance (d) traveled after a given number of hours (t) for each rider:

Jose: Mario: Melanie:

**(b)** Use the equation to calculate the distance traveled in $6\frac{1}{2}$ hours.

Jose: Mario: Melanie:

**(c)** How does a person's cycling rate show up in his or her equation?

**(5)** Are there any proportional relationships? If so, what is the constant of proportionality?