Name _____

Directions: Use the equation $v_{average} = \frac{\Delta d}{\Delta t}$ to answer the following questions. Show your work and include the units.

1. A football field is about 100 m long. If it takes Jenny 20 seconds to run its length, what was her speed?

2. The pitcher's mound in baseball is 85 m from the plate. It takes 4 seconds for a pitch to reach the plate. What the velocity of the pitch?

3. If you drive at 100 km/hr for 6 hours, how far will you go?

4. Every summer Joe drives to Michigan. It is 2000 km to get there. If he averages 100 km/hr, how much time will he spend driving?

5. A bullet travels at 850 m/s. How long will it take a bullet to go 1 km?

6. The fastest train in the world moves at 500 km/hr. How far will it go in 3 hours?

7. How long will it take light moving at 300,000 km/s to reach us from the sun? The sun is 15,000,000 km from earth.

8. It is 21,000 kilometers around the earth and the earth rotates in 24 hrs. How fast is it rotating?

Part II Graphing

Directions: Using the data in the following table, construct a graph of distance vs. time. Then answer the questions about that graph.

Distance (m)	Time (sec)
10	20
20	40
35	70
65	130
85	170
100	200

9. Does this graph represent constant or changing speed? How do you know?

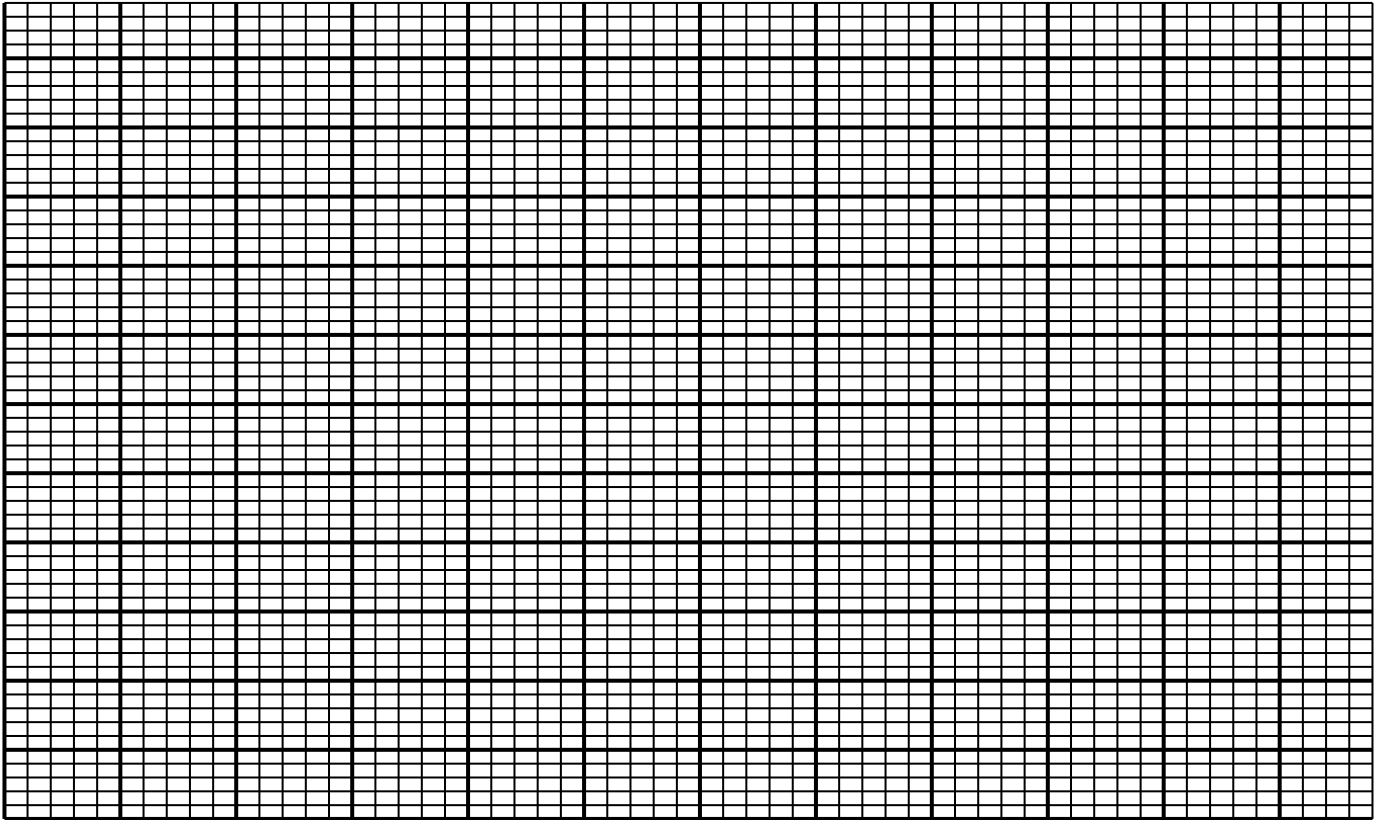10. Find the slope of the line and find the average speed.

Directions: Using the data in the following table, construct a graph of distance vs. time. Then answer the questions about that graph.

Distance (m)	Time (sec)
15	20
25	50
40	65
70	130
90	185
100	200

11. Does this graph represent constant or changing speed? How do you know?

12. Which section of the graph represents the highest speed

Graph I

Graph II