Making and Analyzing Speed Graphs (22 pts)

Part 1: Making a graph (11 pts)
Make a graph for the rolling ball. All data (distance and time coordinates) are given below for a rolling ball.

Time (sec)	Distance (m)
0.3	3
0.5	6
0.7	7.5
0.9	10
1.1	12
1.3	14.3
1.5	15
1.7	17
1.9	20
2.1	22
2.3	23

(1 pt) Title the graph "distance vs. time for rolling ball"

(2 pts) Label x-axis as time in seconds
Label y-axis as distance in meters

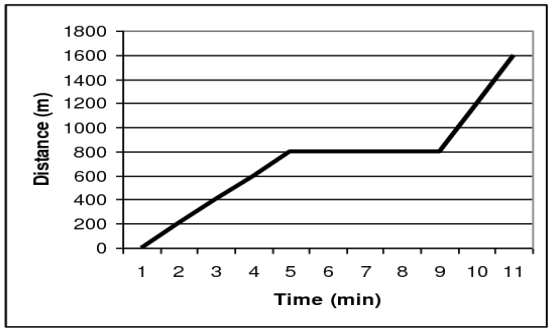
(2 pts) Use a true number line of .10 (.10, .20, .30, etc) for the x-axis
Use a true number line of 1 for the y- axis

(2 pts) Plot the data
Use a line of best fits

Answer the following questions regarding the graph you made

1. What is the ball's speed at 1.3 seconds?
2. What is the ball's speed at 1.7 seconds?
3. Is the ball at constant speed or does it change?
4. What is the slope of this line?

Part 2: Analyzing Speed Graph (5 pts)
Look at the graph and answer the following questions



On Saturday, Ashley rode her bike to visit Maria. Maria's house is directly east of Ashley's. The graph shows how far Ashley was from her house after each minute of her trip.