Calculating Average Speed

Graphical Analysis of Uniform Motion (Average Speed)

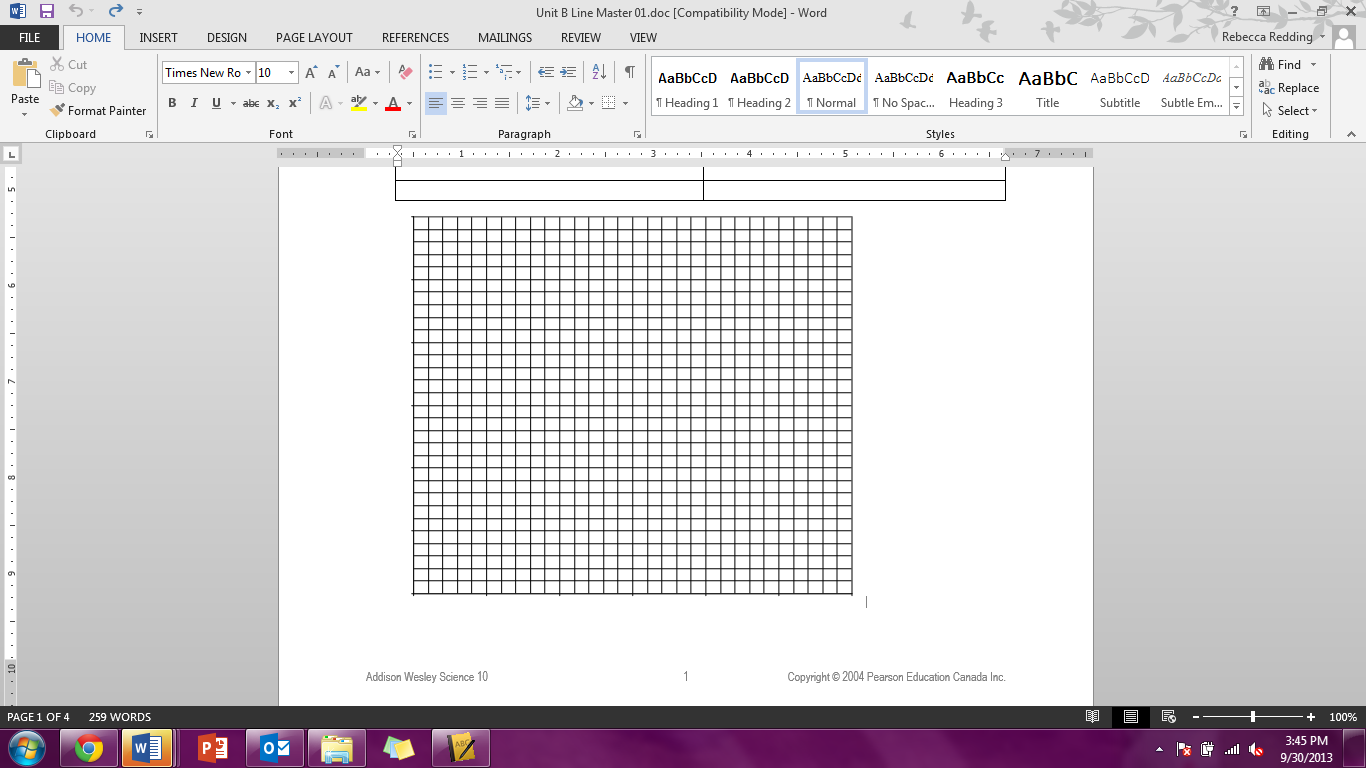
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A ticker tape records the motion of an object at intervals of 0.10 s.

**. . . . . . . . . .**

1. Complete the following table of values, and draw a distance-time graph of the motion.

|  |  |
| --- | --- |
| **Time**  ***t* (s)** | **Distance**  ***d* (cm)** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



2. On the graph, determine the slope of the graph and state what the slope represents.

3. Complete the following table of values, and draw an average speed-time graph of the motion.

|  |  |
| --- | --- |
| **Time**  ***t* (s)** | **Average Speed**  ***v* (cm/s)** |
| 0.0 – 0.10 |  |
| 0.10 – 0.20 |  |
| 0.20 – 0.30 |  |
| 0.30 – 0.40 |  |
| 0.40 – 0.50 |  |
| 0.50 – 0.60 |  |
| 0.60 – 0.70 |  |
| 0.70 – 0.80 |  |
| 0.80 – 0.90 |  |
| 0.90 – 1.00 |  |

