**MATH 205 – Calculus I SQ 2.1**

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

The position of an object, in meters, at time *t*, in seconds, is given by *s*(*t*) = -4.9*t*2 – 8*t* + 25.

Determine each of the following:

1. The average velocity of the object on the time interval of *t* = 2 secs to *t* = 5 secs.

2. The instantaneous velocity of the object at *t* = 3 seconds by completing the table shown below. {Round to 4 decimal places}

|  |  |
| --- | --- |
| **Time Interval** | **Average Velocity** |
| **[3, 4]** |  |
| **[3, 3.5]** |  |
| **[3, 3.1]** |  |
| **[3, 3.01]** |  |
| **[3, 3.001]** |  |
| **[3, 3.0001]** |  |

Instantaneous velocity at *t* = 3 seconds: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is your current homework average? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_