Math 1 - Homework #4

September 23, 2019

This homework should be turned in at the boxes outside 108 Kemeny Hall by **4:00pm on Friday, September 27th**. Unless otherwise stated, all problems can be found in the course textbook.

1 Practice Problems (Optional)

Feel free to do these problems for your own practice. They are not graded, and you don't need to turn them in.

Section 1.2, Exercises 103, 105, 107

Section 2.1: Exercises 1, 2, 3, 7, 8, 9, 18, 19

2 Assigned Problems (Required)

These problems should be turned in and will be graded.

Section 1.2, Exercises 108,110

Section 2.1: Exercises 4,6,8,16,

1 Consider a stone tossed into the air from ground level with an initial velocity of 20 m/sec. Its height in meters at time t seconds is $h(t) = 20t - 4.9t^2$. Use the the average velocity of the stone over the given time intervals to guess the instantaneous velocity of the stone at $t = 1$ sec.

   a $[1, 1.05]$

   b $[1, 1.01]$

   c $[1, 1.005]$

d $[1, 1.001]$