

Math 151**Quiz 2**

Justify all answers with neat and organized work. Clearly indicate your answers.
10 points possible.

1. (3 pts.) Find the function $g \circ f$.

$$f(x) = 2x^2 - x, \quad g(x) = 3x + 2$$

2. (4 pts.) If a ball is thrown into the air with a velocity of 50 ft/sec, its height in feet after t seconds is given by $y = 50t - 16t^2$. Find the average velocity for the time period beginning when $t = 2$ and lasting 0.05 sec.

3. (3 pts.) Determine the infinite limit.

$$\lim_{x \rightarrow 3^+} \frac{2}{(x-3)^5}$$