Name:	

 ${\bf Math~211~Quiz~2}$ 

Section: 322  $\square$ 

 $323\ \square$ 

 $\mathrm{Sep}\ 20,\ 2012$ 

1. (5 pts) Use natural logarithms to solve the equation and simplify your answer.

$$e^{5-x} = \frac{e^2}{10^3}$$

2. (10 pts) Evaluate the following limits.

**a.** 
$$\lim_{x \to 1} (2x^2 - 3)(x+1)^3$$
 **b.**  $\lim_{x \to 1} \frac{\sqrt{x} - 1}{x - 1}$ 

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$$\lim_{x \to 1} \frac{\sqrt{x} - 1}{x - 1}$$

3. (5 pts) The position, in meters, of an object is given by the equation  $f(t) = 1 - t^2$ , where t is measured in seconds. Find the velocity and the speed of the object after 2 seconds.