

Last Name: _____

First Name: _____

Student ID: _____

Quiz 4 (A)

Question 1. (4 marks) Evaluate the following limit:

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

Question 2. (6 marks) Determine where the following function is continuous. Explain your answer.

$$f(x) = \begin{cases} -5x + 3 & \text{if } x < 0 \\ 4 & \text{if } x = 0 \\ 4x^2 - x + 3 & \text{if } x > 0 \end{cases}$$