King Fahd University of Petroleum & Minerals Department of Mathematics and Statistics Math101/Calculus I Quiz 1 Two Problems, September  $6^{th}$ , 2015 <sup>1</sup>

## Problem 1 (10 points)

Find the following limits.

(1) 
$$\lim_{x \to 1} \frac{3 - \sqrt{4x + 5}}{1 - x} =$$

(2) 
$$\lim_{x \to 1} \frac{2x^2 - 3x + 1}{x^2 + x - 2} =$$

Problem 2 (5 points)

Use the Squeeze Theorem to find  $\lim_{x\to 0} x^2 sin(\frac{1}{x})$ .

 $<sup>^1\</sup>mathrm{The}$  quiz lasts 15 minutes.