

**Quiz #2**

MATH 105 – Amber Buntin – Fall 2015

Directions: Please **show as many steps as possible** while computing the following limits. Use **concepts/techniques of CALCULUS** in order to evaluate the limits.

1. (3 points each) Evaluate the following limits using algebraic techniques.

a.  $\lim_{x \rightarrow -3} (-2x^2 - 3x + 13)$

b.  $\lim_{x \rightarrow 49} \frac{\sqrt{x} - 7}{x - 49}$

2. (4 points) Evaluate the following limit at infinity using algebraic techniques.

$$\lim_{x \rightarrow \infty} \frac{1 - 2x^2 + 4x}{3 + 8x^2}$$