

MATH 133 – Calculus with Fundamentals 1
Quiz 4 – October 8, 2015

Your Name: _____

Directions

Do all work in the space provided below or on the back of the second sheet. There are 30 total points possible. You may use a calculator (but not any graphing features).

Questions

- 1) (10) Explain why the following limit is an indeterminate form and compute the limit with our algebraic techniques:

$$\lim_{x \rightarrow 1} \frac{x^2 + 3x - 4}{x^2 - 6x + 5}$$

2) (10) Compute:

$$\lim_{h \rightarrow 0} \frac{\frac{1}{(3+h)^2} - \frac{1}{9}}{h}$$

3) (10) Compute:

$$\lim_{x \rightarrow -2} \frac{x+2}{\sqrt{x+4} - \sqrt{2}}$$