

Math 165 (Chris Kurth)
Spring 2008
Quiz 3

Show all work. Answers without work will not receive credit.

1. (6 points) $f(x) = \frac{x^2 - 5x - 6}{x - 6}$ is not defined at a certain point. How should it be redefined to make it continuous there?

2. (6 points) For what values of u is the following function continuous?

$$f(u) = \frac{2u + 7}{\sqrt{u + 5}}$$

3. (8 points) Using the limit definition, find the slope of the tangent line to the curve $y = x^3 - 3x$ at the point where $x = -2$.