

Math 171 - Quiz 7

October 14, 2010

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3.3 points) Find the critical numbers of $f(x) = \frac{x^2}{(x-1)}$.

2. (4.4 points) Find the absolute extreme values of $g(x) = x^3 - 3x^2 + 3x - 1$ on $[-4, 3]$.

3. (2.3 points) Find the number c that satisfies the conclusion of Rolle's theorem for the function $f(x) = -x^3 + x$ on the interval $[0, 1]$.