Math 171 - Quiz 3

Name _____

September 18, 2014

Score _____

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

1. (6 points) Let $f(x) = 1/x$. Use the limit definition of derivative to determine $f'(x)$.

2. (2 points) Given the following table of values, find an equation for the line tangent to the graph of g at the point where $x = 2$.

x	0	1	2	3	4
$g(x)$	0	1.5	-0.8	-4.0	-2.6
$g'(x)$	2.6	-0.3	-3.8	-1.4	3.9

3. (2 points) Sketch the graph of a function that is continuous everywhere but is not differentiable at $x = -2$ and $x = 3$.