

Quiz 6

Spring 2013

Your name: _____

Math 0220

Your TA's name: _____

No calculators, no notes, no books. Show all your work (no work = no credit). Write neatly. Simplify your answers.

1. [5 points] Find f if $f'(x) = e^x + 5(1 + x^2)^{-1}$ and $f(0) = -1$.

2. [5 points] Let A be the area of the region that lies under the graph of $f(x) = \sqrt{x}$ between 2 and 4. Using right endpoints, find an expression for A as a limit. Do not evaluate the limit.

bonus problem [5 points extra] A stone was dropped off a cliff and hit the ground with a speed of 80 ft/s. What is the height of the cliff? Assume for simplicity that the gravitational acceleration is 32 ft/s².