

Name: _____

Math 152 Calculus II – Crawford

Quiz 1

12 February 2015

Books, notes (in any form), and calculators are not allowed. *Show all your work.* Good Luck!

1. (8 pts) Differentiate the following functions. [Do not simplify.]

(a). $y = \cos(\ln x)$

(b). Expand the RHS first and then differentiate: $y = \ln \left(\frac{\sqrt{4x^2 + x}}{(2x + 3)^5} \right)$

2. (7 pts) Evaluate the integrals.

(a). $\int \frac{x}{2x^2 + 1} dx$

(b). $\int \frac{1}{3t} dt$