

Math 172 - Quiz 2

August 30, 2017

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary. YOU MUST WORK INDIVIDUALLY.

1. (4 points) Evaluate each integral.

(a) $\int \frac{x^2}{5 - x^3} dx$

(b) $\int \frac{1}{y \ln y^3} dy$

2. (3 points) Evaluate the definite integral: $\int_0^1 \frac{x - 1}{x + 1} dx$

3. (2 points) Suppose $f(x) = \sqrt{2x - 4}$. Determine f^{-1} .

4. (1 point) Determine the derivative: $\frac{d}{dx} \ln(x^2 + 5)^3$