

Name: _____

Math 105B: Winter 2013

Quiz 4: February 15

Correct answers accompanied by incorrect or incomplete work will not receive full credit. Good Luck!

1. Calculate the derivative of

$$y = \frac{3}{x^4} + 5e^x - 9 \ln x + \frac{2^x}{6} + e^5$$

2. Calculate the antiderivative of

$$f(x) = \frac{3}{x^4} + 5e^x - 9x^{-1} + \frac{2^x}{6} + e^5$$

OVER

3. Solve the initial value problem

$$y' = 2x^7 - x^2, \quad y(1) = 2$$

4. Solve the initial value problem

$$y' = 0.6y, \quad y(0) = 21$$