

- To use this as a practice quiz, you should have studied the problem banks in advance.
- Put away all material and set a timer for 10 minutes. (You will have 10 minutes for this quiz in class.)
- Go to your math mentors study hours to check your answers.

Practice Quiz Derivatives, Fall 2017

Version: 2

Name (Print): _____ RIN: _____

Math Mentor Name: _____

Rules: Notes, calculators, cell phones and headphones are not allowed.

Honor Code Pledge: I did not violate any rules on this quiz and have no knowledge of any other student violating rules on this quiz. _____ (Signature)

Instructions: Put your final answer in the box shown. No partial credit will be given and nothing outside the box will be graded.

1. Let $y = (x^6 + 14)^{\frac{5}{6}}$. Find $\frac{dy}{dx}$. Express your answer in terms of elementary functions.

2. Let $y = -\ln(e^t + 5)$. Find $\frac{dy}{dt}$. Express your answer in terms of elementary functions.

3. Differentiate the function $f(t) = \frac{5e^t}{\sec(t)}$. Express your answer in terms of elementary functions.

4. Let $y = \sec(t) + 2t^7$. Find $\frac{dy}{dt}$. Express your answer in terms of elementary functions.

5. Let $y = (3 - 3t^{\frac{3}{2}})e^t$. Find $\frac{dy}{dt}$. Express your answer in terms of elementary functions.