

_____ / 10 points

Name: _____

In order to receive credit for this quiz, **all work must be shown** and legible. If you need extra space, use the back of this page and indicate that you have done so. Unsupported or otherwise mysterious answers will not receive credit. You may use a calculator. You may use your notes on this quiz.

Compute the following derivatives by hand. Circle your final answers.

1. $f(x) = \frac{1}{\sqrt[4]{x^{3/2}}}$

2. $f(s) = \frac{1 - s^2 - s^{50}}{5s^2 - 4s}$

3. $y = e^x (x^2 - 5x + 1) (6x^3)$

4. $g(x) = x^{7/2} (2x^{5/9} - 8x^{1/2})$

5. $f(z) = \frac{\sqrt[3]{z}(z^5 - 403z)}{z^5 + 1}$