

Name \_\_\_\_\_

Show all work.

## U241 Quiz 4

October 9, 2008

1. (3 points) Differentiate the function

$$f(x) = (4x^3 - 0.5x^2 + 10)(2e^x - x)$$

2. (3 points) Differentiate the function

$$h(t) = \frac{6t^4 + 4t^3 - 2\sqrt{t}}{2t^3} + e$$

3. (4 points) Differentiate the function

$$g(x) = \frac{10 - 2e^x}{x^2 - 5x^3 + 1}$$