

Math 019-G Spring 2013  
Quiz 8: **Due: Thursday April 18th**

Name: \_\_\_\_\_

*Remember to show all work for full credit.*

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**1)** Find all relative extrema of the following function:  
(*Hint: Use the first derivative Test AND FACTOR!!!*)

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

2) Find all intervals where the function is concave upward or concave downward, as well as all points of inflection:

$$f(x) = x^{8/3} - x^{5/3}$$