

Math 1A: Quiz 3

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Name: _____

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You must always justify your answers. This means: show your work, show it neatly, and when in doubt, use words (and pictures!) to explain your reasoning. No justification = no points.

1. (6 pts) Find all numbers x such that $y = (x^2 - x - 1)e^x$ has a horizontal tangent at (x, y) .

2. (4 pts) Find the derivative of the following function:

$$f(x) = \frac{x^2}{1 + 5x}$$

3. (bonus) On the back of this page, explain something you did well on the midterm, and something you didn't.