# Math 1A: Quiz 7

Name: _____

GSI: Theo Johnson-Freyd

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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. (4 pts) Without a calculator, estimate the value of the $(3.99)^{3/2}$ to two decimal places.

2. (6 pts) Find the absolute extrema of $f(x) = \dfrac{x+1}{x^2+3}$ on the interval $x \in [0, 2]$.

3. (bonus) On the back of this page, find the $n$th derivative of $x^n/(1-x)$.