You have 20 minutes to complete the quiz. No calculators.

Name:

1. (2 points) Evaluate $\lim_{x \to 0}(x+1)^{1/\sin x}$.

2. (3 points) Graph $y = \frac{4}{x^2+3}$. To do this, (a) find the intervals of increase/decrease, (b) find the local extrema, (c) find the intervals where the graph is concave up/down, and (d) find the inflection points. Find the y-coordinate for local extrema and inflection points.