

Present neatly on ~~separate paper~~. Justify for full credit. ~~No Calculators.~~

Name _____ Score _____ 15 minutes

1.

Use the sketching guidelines to discuss the given function completely. Your analysis should conclude with a neat sketch.

$$y = \frac{x}{x^2 + 9}$$

Your discussion should include: domain, asymptotes, intercepts, increasing/decreasing behavior, concavity, inflection points, and relative extrema.