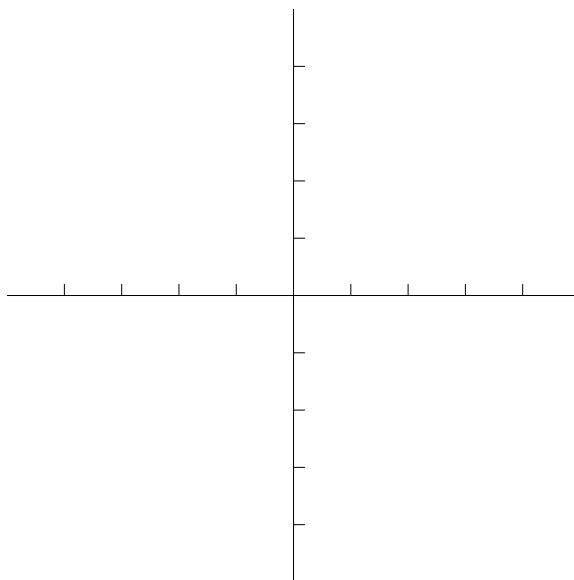


Name: \_\_\_\_\_

### Quiz 7

Show all work. Be sure to justify your answers.

- (3 points) Decide whether or not each of the following properties applies to  $f(x) = \frac{e}{x}$ . You may wish to sketch a graph to justify your answer.
  - The function is one-to-one.
  - The range of the function is  $(-\infty, \infty)$ .
  - The function is decreasing on  $(-\infty, \infty)$ .
  - The function has an asymptote.
  - The domain of the function is  $(-\infty, \infty)$ .
  - The function has a turning point.
- (4 points) Graph  $y = -2^{x+1} + 3$  on the axes below. Specify any intercepts or asymptotes.



- (3 points) Evaluate  $\log_{25} 10 - \log_{25} 50$ .