

Quiz 2

Show all work and clearly identify your answers.

1. Find any axis intercepts, and determine any axis or origin symmetry for the graph of

$$y = x^2 + 3.$$

2. Find the domain of the function

$$f(x) = \frac{1}{\sqrt{x^2 - 2x - 3}}.$$

3. Is this function *even*, *odd*, or *neither*?

$$f(x) = \frac{3x}{x^2 + 1}$$

Solutions

- 1.) y -intercept: $(0, 3)$. No x -intercepts. Symmetric about the y -axis.
- 2.) $(-\infty, -1) \cup (3, \infty)$
- 3.) This function is odd.