

Name: _____

Math 231 Quiz 1

1. (5 pts) (1) Find $f(0)$, $f(1)$, and $f(2)$, where

$$f(x) = \begin{cases} 2x - 1 & \text{if } x \leq 1 \\ x^2 & \text{if } x > 1. \end{cases}$$

- (2) Sketch the graph of f .

2. (5 pts) Find the domain of the function.

(a) $f(x) = \frac{x + 4}{x^2 - 16}$

(b) $g(x) = \sqrt{1 - \sqrt{x}}$

3. (5 pts) Determine whether f is even, odd, or neither. Explain your reasoning.

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

4. (5 pts) Find an equation of the line that passes through the points $(2, 2)$ and $(3, 0)$.