Your Name:

Duration of the Quiz is 20 minutes. There are four problems, worth 20 points. Show all your work for full credit. Books, notes etc. are prohibited. Calculators are NOT permitted.

1. Compute the composite functions $f \circ g$ and $g \circ f$ and discuss their domains, where

$$f(x) = \sqrt{x}, \qquad g(x) = 1 - x$$

2. Let $f(x) = \sqrt{x}$ and $g(x) = x^2 - 5x + 6$. Compute f/g and discuss its domain.
   Hint: $x^2 - 5x + 6 = (x - 2)(x - 3)$

3. Determine whether the following function is even, odd, or neither. Justify your answer. $g(x) = \dfrac{x^{2021}}{\sqrt{1 + x^{2022}}}$

4. Determine whether the curve is the graph of a function of x.