

WRITE YOUR NAME:

MAC 2241 Homework 2

Due in class, Friday February 2nd

You can use more paper if necessary, but please STAPLE

Question 1. Find the domain of the function.

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

Question 2. Find the functions $f \circ g$ and $g \circ f$ and their domains. Simplify as much as possible.

$$f(x) = x + \frac{1}{x}, \quad g(x) = \frac{x+1}{x+2}$$

Question 3. Find the domain of the function.

$$f(x) = \frac{5}{1 - e^x}$$

Question 4. What values of x satisfy the inequality $\ln x < 0$?