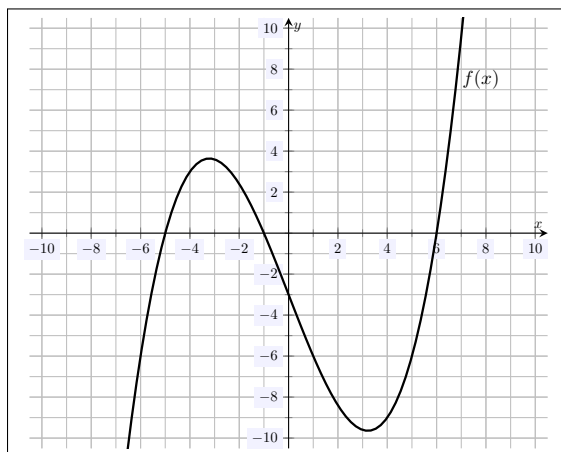**Name:** _____

MATH 111-I

Spring 2025

Quiz 2

Problem 1: Suppose an item that costs p dollars is discounted by 30%. Find an expression that gives the discounted cost of the item.

Problem 2: Is $x = -2$ a solution to the equation $\dfrac{2x-1}{x+1} = x^2 + 1$? Explain.

Problem 3: Consider the function $f(x)$ plotted below.

(a) Find the x-intercepts.

(b) Find the y-intercepts.

(c) What is $f(7)$?

(d) Solve the equation $f(x) = -6$.