Quiz 7

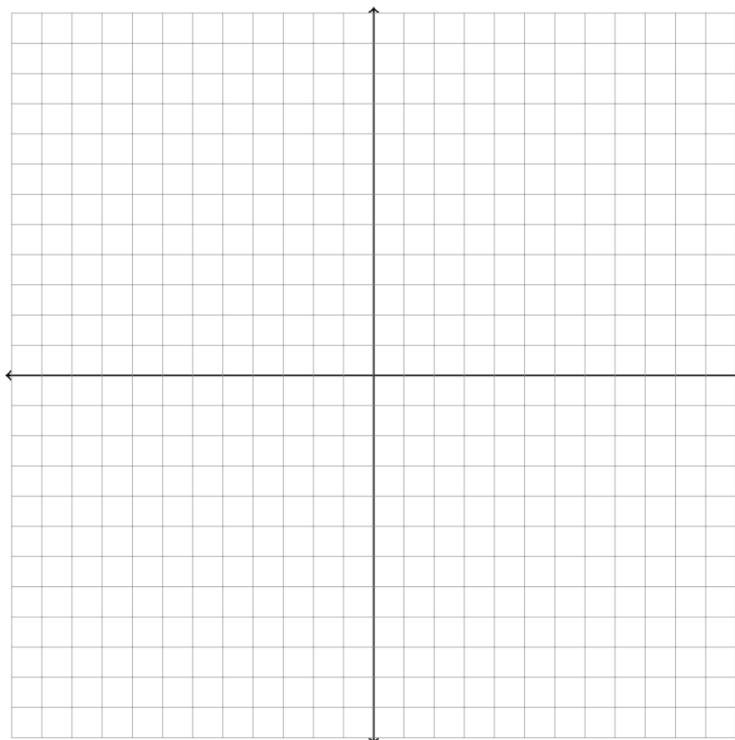**Honor Code**: On my honor, I have neither given nor received any aid during this examination.

Instruction: You are not allowed to use a calculator during this examination. You need to show all necessary steps to get credit. This document is **double-sided**.
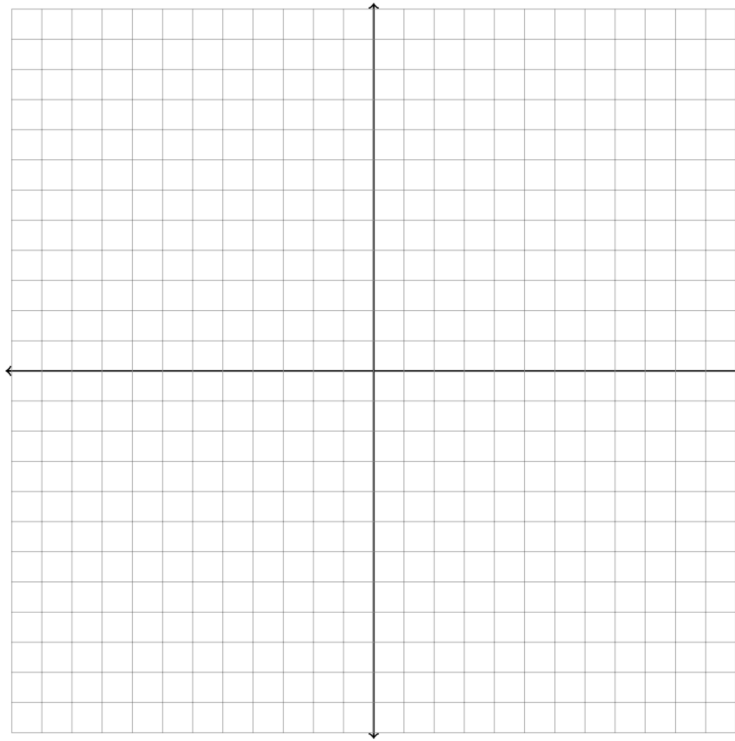
Name: _____

Problem 1

(a) Sketch the region enclosed by the curves $y = x - 2$ and $y^2 = 3x + 4$.

(b) Write an integral that represents the **area** of the region in part (a). **Do not evaluate the integral.**

Problem 2

(a) Sketch the region enclosed by the curves $y = \sqrt{x}$ and $y = \frac{1}{3}x$.

(b) Write an integral that represents the **volume** of the solid of revolution obtained by rotating the region in part (a) about the xaxis. **Do not evaluate the integral.**