

Quiz 3

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: _____

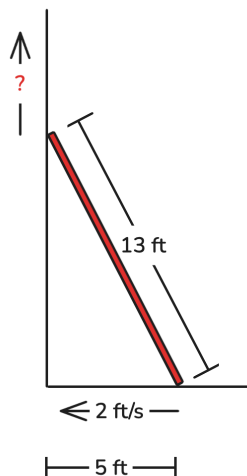
Problem 1

Suppose the relation between y and x is given implicitly as

$$\sec(x - y) = x^2 - \pi$$

find y' (or $\frac{dy}{dx}$).

Problem 2



A ladder 13 feet long is leaning against a high wall.

The base of the ladder is pushed toward the wall at the rate of 2 feet per sec.

At what rate is the top of the ladder moving up the wall when the base of the ladder is 5 feet from the wall ?