Day 3: Basic Probability Puzzles

#7

Objective

In this challenge, we practice calculating probability.

Task

A firm produces steel pipes in three plants.

- Plant A produces 500 units per day and has a fraction defective output of 0.005.
- Plant B produces 1000 units per day and has a fraction defective output of 0.008.
- Plant C produces 2000 units per day and has a fraction defective output of 0.010.

At random, a pipe is selected from the day's total production and it is found to be defective. What is the probability that it came from plant A?

Output Format

In the editor below, submit your answer as $Plain\ Text$ in the form of an irreducible fraction A/B, where A and B are both integers.

Your answer should resemble something like:

3/4

(This is **NOT** the answer, just a demonstration of the answer format.)