

In the kingdom of **Avyana**, a wise and shrewd merchant **Anika** is preparing for a voyage aboard her renowned trading ship, the **Silver Moon**. She is set to trade valuable goods at the **Grand Bazaar of Zephyria**, where profit margins are high.

Anika has received **N items**, each with a **profit** and a **weight**. However, her ship has a strict **weight capacity CCC**, meaning she must carefully choose which items to carry to **maximize her total profit**.

Unlike typical trading, where items must be taken as a whole, **Anika can take fractional amounts of items**, meaning she can **split an item** and take only a part of it if necessary.

Your task is to help **Anika determine the maximum profit** she can earn by optimally filling the **Silver Moon** while adhering to the weight constraint.

Input Format

- The first input line contains an integer NNN, the number of items.
- The second line contains NNN space-separated integers representing the **profits** of the items.
- The third line contains NNN space-separated integers representing the **weights** of the items.
- The fourth line contains a single integer CCC, the maximum weight capacity of the ship.

Output Format

- A single floating-point number representing the **maximum possible profit**, rounded to two decimal places.