

Stand Behind Braum!

Problem ID: standbehindbraum

Braum is a tank character in the Multiplayer Online Battle Arena game League of Legends. Braum's task is to absorb as much damage from the enemy so that his allies may win the fight. Recently, Braum's performance has fallen off and he just isn't as dominant as he once was. Refusing to be upset, Braum instead decides to hunker down and figure out some strategies so that he can be a better tank. He decides that if he can calculate the amount of incoming damage, he can adjust his item purchases to better protect his allies.

Given an incoming onslaught of attacks, Braum wants to calculate the Total Damage he'll take. Attacks come in three damage types, **Physical Damage**, **Magical Damage**, and **True Damage**. We can calculate the Total Damage Taken as a sum of the Physical, Magical, and True Damage Taken:

$$\text{Physical Damage Taken} = \text{Physical Damage} \cdot \left(\frac{100}{100 + \text{Armor}} \right)$$

$$\text{Magical Damage Taken} = \text{Magical Damage} \cdot \left(\frac{100}{100 + \text{MR}} \right)$$

$$\text{True Damage Taken} = \text{True Damage}$$

Braum notices that the total damage possesses the following relationship, $\alpha + \beta + \tau = 1$. And furthermore where the values of α, β, τ possess the following relationships:

$$\alpha = \frac{\text{Physical Damage}}{\text{Total Damage}}$$

$$\beta = \frac{\text{Magical Damage}}{\text{Total Damage}}$$

$$\tau = \frac{\text{True Damage}}{\text{Total Damage}}$$

Input

You will be given two lines of input. The first line contains α, β, τ , and x representing the percent of Physical, Magical, True, and Total damage. The second line contains the Armor and MR values that Braum has.

Output

Output the Total Damage Taken by Braum from the incoming attacks, rounded down to the nearest integer value.

Sample Input 1

0.3 0.4 0.3 1000
40 30

Sample Output 1

821

Sample Input 2

0.9 0.1 0.0 650
120 30

Sample Output 2

315
