

Death battle codevita

Death Battle

Problem Description

In a crossover fantasy universe, Houin Kyoma is up in a battle against a powerful monster Nomu that can kill him in a single blow. However being a brilliant scientist Kyoma found a way to pause time for exactly M seconds. Each second, Kyoma attacks Nomu with certain power, which will reduce his health points by that exact power. Initially Nomu has H Health Points. Nomu dies when his Health Points reach 0. Normally Kyoma performs Normal Attack with power A . Besides from Kyoma's brilliance, luck plays a major role in events of this universe. Kyoma's Luck L is defined as probability of performing a super attack. A super attack increases power of Normal Attack by C . Given this information calculate and print the probability that Kyoma kills Nomu and survives. If Kyoma dies print "RIP".

Constraints

$$0 < T \leq 50$$

$$1 \leq A, H, C, L1, L2 \leq 1000$$

$$1 \leq M \leq 20.$$

$$L1 \leq L2$$

Input Format

First line is integer T denoting number of test cases.

Each test case consist of single line with space separated numbers $A \ H \ L1 \ L2 \ M \ C$. Where luck L is defined as $L1/L2$. Other numbers are, as described above.

Output

Print probability that Kyoma kills Nomu in form $P1/P2$ where $P1 \leq P2$ and $\gcd(P1, P2) = 1$. If impossible, print "RIP" without quotes.

Timeout

1

Explanation

Example 1

Input

2

10 33 7 10 3 2

10 999 7 10 3 2

Output

98/125

RIP