Sum of fractions   P76024_en

Write a program that reads triples of natural numbers a, b and k, and for each one computes and prints the result of

$$\frac{1}{a} + \frac{1}{a+k} + \frac{1}{a+2k} + \cdots$$

for all fractions with denominator smaller than or equal to b.

Input

Input consists of several triples of natural numbers a, b and k, such that $1 \le a \le b$ and $k \ge 1$.

Output

For each triple, print in a line the result of the sum with four digits after the decimal point.

Sample input

```
1 3 1
5 5 2
5 6 2
5 7 2
```

Sample output

```
1.8333
0.2000
0.2000
0.3429
```

Problem information

Author : Salvador Roura
Translator : Carlos Molina
Generation : 2016-12-13 10:18:10