

## Problem Q: Health

**Source:** `health.{c,cpp,java}`

**Input:** `console {stdin,cin,System.in}`

**Output:** `console {stdout,cout,System.out}`

Annual membership at a health club costs **M** dollars. In addition to the annual membership fee, members are normally charged an admission of **A** dollars upon each visit. After **F** visits, however, members are entitled to one free admission.

For example, if **M** = **100.00**, **A** = **4.00**, **F** = **10**, and a particular member visited the club 60 times during the year, then five of the 60 visits were free. The total cost to the member is **100.00 + 55 \* 4.00 = 320.00** and the average cost per visit is **320.00 / 60 = 5.33** (rounded to the nearest cent).

### Input

Each line of the input will contain data for one problem instance: positive values for **M**, **A** and **F** (defined above), and the actual number of visits **V**. **M** and **A** are positive floating point numbers (specified to two decimal places), **F** is a positive integer, and **V** is a non-negative integer. The end of input will be marked by end-of-file.

### Output

For each line of input, the output will consist of the average cost per visit, displayed with a precision of two decimal places, i.e., rounded to the nearest cent.

### Sample Input

```
100.00 4.00 10 60
100.00 4.00 10 55
```

### Sample Output

```
5.33
5.45
```