

# Depreciation

ABC Company has just installed a new production line. The company is considering the appropriate method and rate of depreciation for each year. By design, the equipment has a shelf life of  $N$  years. In the first year, the depreciation rate is assumed to be  $X$ , the company wants the depreciation rate to decrease gradually according to the number of years of use as follows:

- First year:  $X$
- Second year  $X - X*1/N$
- Third year:  $X - X*2/N$
- ...

After  $N$  years of usages, the value of the equipment is  $R$ . Calculate the initial value of  $X$

## Input

A single line has three numbers separated by a space, the corresponding number of years using  $N$  ( $1 \leq N \leq 1000$ ), initial value  $C$  ( $0 < C < 10^{18}$ ), and residual value ( $0 < R < 10^{18}$ ).

## Output

Print out the depreciation rates for the first year with 6 decimal place accuracy

## Example

### Input:

5 1000000000 500000000

### Output:

0.2122959