

BlueBook - Pop Explosion

Time limit: 1.0s **Memory limit:** 16M

BlueBook

The population of a certain country has been increasing at an average rate of P percent each year. Assuming that the population was A in year Y , write a program that finds the year in which the population will reach B if the growth pattern continues.

Input, Output

The order of input will be P, A, Y, B . Output should be in whole numbers (i.e. no decimals).

Sample Input

```
5.5 24000000 1980 100000000
```

Sample Output

```
2007
```