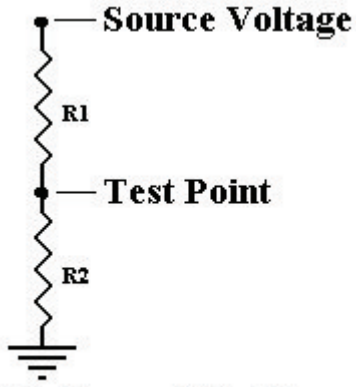
Problem 9	**Truly Shocking**	4 Points

Program Name: shocking.cpp **Input File: shocking.dat**

One of the most fundamental principles of electrical engineering is the voltage divider. The voltage divider consists of two resistors connected in series as seen in the figure below.



Voltage Divider

In this program, you will be required to compute the voltage at the test point for voltage dividers. Some simple equations related to this problem are in the table below.

#	Equation	Explanation
1	$R_3 = R_1 + R_2$	The resistance of two resistors in series (R_3) is computed as the sum of the resistances (R_1 and R_2).
2	$V = I * R$	The voltage V across a resistor is equal to the current (I) times the resistance (R).
3	$TP = \frac{SV * R_2}{R_1 + R_2}$	Derived from #'s 1 and 2, the voltage at the test point of a voltage divider is based on a ratio of the resistance between the test point and ground versus the total resistance.

Input

Input to your program will consist of a series of voltage dividers each on a line by itself. Each line will contain 3 integers each separated by a space. The first two integers represent the resistance in ohms of the resistors #1 and #2 respectively ($0<R_1, R_2 \leq 10000$). The third integer represents the source voltage ($0 < SV \leq 1000$). There will be no invalid or extraneous input and no input values will have leading zeroes.

Output

For each input line, your program will produce a single line of output with the voltage of the test point starting in column 1. Output values are to be printed with at least one digit to the left of the decimal and exactly 3 digits to the right of the decimal. There should not be any leading zeroes to the left of the decimal unless the only digit is a zero. Your program should not contain any extraneous output or blank lines.

Example: Input File

```
1200 1800 124
800 75 120
2763 2351 10
6135 73 5
```

Output to screen

```
74.400
10.286
4.597
0.059
```