

Practice Problem A : Waiting for the Train

Roxana is standing at the train station, waiting for her train to arrive. Naturally it's quite late, which is unfortunate for her: she needs to take this train to her math conference. The station attendant tells her that the train will arrive between A and B minutes from now.



We will assume that there is a constant probability that the train arrives at any point during the interval $[A, B]$. If the train takes more than C minutes to arrive, then Roxana will be late for her conference, and consequently she will be sad.

Write a program to output what the probability is that Roxana will not be sad.

Input Specification:

The input begins with an integer T , the number of test cases. Following this are T lines with 3 positive integers each: A , the first time at which the train could possibly arrive, B , the last time at which the train could arrive, and C , the latest the train can arrive for Roxana to make it to her conference on time. $A < B < 50000$

Output Specification:

For each test case, print to two decimal places (rounded) the probability that Roxana is not sad.

Java types can use `System.out.printf("%.2f\n" , ans) ;` to print a double
C/C++ users can use `printf("%.2lf\n" , ans) ;` to print a double

Sample Input:

```
3
3 5 4
1 10 9
1337 31337 8008
```

Sample Output:

```
0.50
0.89
0.22
```