

G - Probability

Time Limit: 1 sec

Memory Limit: 16MB

Consider rectangular coordinate system and point $L(X,Y)$ which is randomly chosen among all points in the area A which is defined in the following manner: $A = \{(x,y) \mid x \in [-a;a]; y \in [-b;b]\}$. What is the probability P that the area of a rectangle that is defined by points $(0,0)$ and (X,Y) will be greater than S ?

INPUT:

The number of tests $N \leq 200$ is given on the first line of input. Then N lines with one test case on each line follow. The test consists of 3 real numbers $a > 0$, $b > 0$ or $S \geq 0$.

OUTPUT:

For each test case you should output one number P and percentage “%” symbol following that number on a single line. P must be rounded to 6 digits after decimal point.

SAMPLE INPUT:

```
3
10 5 20
1 1 1
2 2 0
```

SAMPLE OUTPUT:

```
23.348371%
0.000000%
100.000000%
```

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Huge Easy Contest #1