

Area Under the Curves

Input File: area.txt

A very common activity in math classes is finding the area under a curve; your task for this challenge is very similar. Given two straight lines which intersect in Quadrant I (positive x, positive y) and form a quadrilateral with **both** the x-and y-axis, you must find the confined area.

Input:

The first line contains an integer N. For every N, you will receive 2 lines, each defining one mathematical line. The lines will be formatted like this: $A x + B y = C$, where A, B, and C are double coefficients.

Output:

You should output the areas confined by the given lines. The output should be in doubles, rounded to the nearest thousandth. The value 1 should still be printed as 1.000.

Example Input:

```
3
0 x + 1 y = 1.0
1.0 x + 0 y = 1.0
1.0 x - 2 y = -4.0
2.0 x - 1 y = 2.0
4.5 x - 1 y = 10
2 x - 0.5 y = -1
```

Example Output:

```
1.000
4.333
132.889
```

Example Input:

2
2 8
SLOOOOXX
NNNNNNNN
5 8
AFGNOFFA
FSFOOLGG
ALNNNGGG
AGONALLA
ALOXANNL

Example Output:

0
30