

B - Rolling Rope

*Friendship is like music;
two ropes of the same tone will vibrate both together,
even if only one is played.*
José Zorrilla

Context

Pedrito is home alone, very bored, and he just has a rope and a cylinder to have fun. But he has had an idea: roll the rope in the cylinder.

The Problem

A rope is wound symmetrically around a circular bar. The rope goes exactly x times around the bar, which has a circumference of c centimeters and a length of k centimeters.

For example, in the figure below you can see a rope that goes around the bar 4 times.



The problem is to calculate the length of the rope.

The Input

The first line of the input contains an integer, t , indicating the number of test cases.

For each test case, there is a line with three natural numbers separated by a space. The first one, c , represents the length of the circumference, $1 \leq c \leq 100$, the second number, k , is the length of the bar, $1 \leq k \leq 100$, and the third number, x , indicates how many turns the rope goes around the circular bar, $1 \leq x \leq 100$.

The Output

For each test case, the output should consist of one line showing the length of the rope. If the result is not an integer number, you have to truncate the number.

Sample Input

```
5
1 2 3
2 3 4
3 4 5
```

4 5 6

5 4 3

Sample Output

3

8

15

24

15

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