

# Grid Points in a Triangle

How many points  $(x, y)$  with non-negative integer coordinates satisfy  $y \leq ax / b$  and  $x \leq n$ ?

## Input

The first line contains an integer  $T$  ( $T \leq 100000$ ).  $T$  lines follow, each contains three positive integers  $n, a, b$ , where  $n, a, b \leq 10^9$  and  $a \leq b$ .

## Output

$T$  lines, each contains a single integer denoting to the number of points according to the description.

## Example

### Input:

```
5
8 2 10
8 4 4
7 1 5
713241932 127894722 957823358
759096725 496666160 980149020
```

### Output:

```
13
45
11
33963383064794976
145994569610845896
```

**Warning: enormous input/output data, be careful with certain languages**