

Easy sum



Little Kevin had never heard the word 'Infinitum'. So he asked his mentor to explain the word to him. His mentor knew that 'Infinitum' is a very large number. To show him how big [Infinitum](#) can be, his mentor gave him a challenge: to sum the numbers from 1 up to N . The sum started to get really large and was out of `long long int` range. And so the lesson was clear.

Now his mentor introduced him to the concept of *mod* and asked him to retain only the remainder instead of the big number. And then, he gave him a formula to compute:

$$\sum_{i=1}^N (i \% m)$$

Input Format

The first line contains T , the number of test cases.

T lines follow, each containing 2 space separated integers N m

Output Format

Print the result on new line corresponding to each test case.

Constraint

$$1 \leq T \leq 1000$$

$$1 \leq N \leq 10^9$$

$$1 \leq m \leq 10^9$$

Sample Input

```
3
10 5
10 3
5 5
```

Sample Output

```
20
10
10
```

Explanation

Case 1: $N = 10$ $m = 5$,

$$1\%5 + 2\%5 + 3\%5 + 4\%5 + 5\%5 + 6\%5 + 7\%5 + 8\%5 + 9\%5 + 10\%5 = 20.$$

Similar explanation follows for Case 2 and 3.