Problem E: Divisor Series

Filename: *series*
Time limit: *10 seconds*

Justin is thinking about arithmetic sequences and series when he remembers a couple key facts:

1. An **arithmetic sequence** is a sequence of numbers in which the difference between any two consecutive terms is constant. Formally, for any pair of consecutive terms a_i and a_{i+1} in an arithmetic sequence, $a_{i+1} - a_i = d$ must hold, where d is a constant known as the **common difference**.
2. An **arithmetic series** is the sum of all terms of an arithmetic sequence. Formally, the sum S_n of the first n terms in an arithmetic sequence is equal to $\frac{n}{2}(a_1 + a_n)$.

After combining this with his knowledge of number theory, Justin came up with a new series called the divisor series, denoted as D_n, which is equal to the sum of the number of divisors for each number in an arithmetic sequence. Formally, if $div(a_i)$ is equal to the number of divisors for a term a_i in an arithmetic sequence, then $D_n = \sum_{i=1}^{n} div(a_i)$.

Unfortunately, this turns out to be a rather difficult problem on its own. To make things easier, we will only consider arithmetic sequences where $a_1 = d$.

The Problem

Given the number of terms in the arithmetic sequence, as well as a number which represents both the first term in the arithmetic sequence and the common difference, calculate the divisor series D_n for the arithmetic sequence.

The Input

The first line of the input will contain one integer, t ($1 \leq t \leq 25$), representing the number of test cases.The following t lines will each contain two integers: n ($1 \leq n \leq 10^6$), representing the number of integers in the arithmetic sequence, followed by and d ($1 \leq d \leq 10^{12}$), representing the common difference of the arithmetic sequence (again, note that $d = a_1$.)

The Output

Print one integer, D_n, on its own line.

Sample Input	Sample Output
4 2 5 3 8 7 11 71 6653	6 17 32 628

Explanation of the first three test cases.

The input states that the arithmetic sequence is of length 2 and has common difference and initial term equal to 5. Thus, the full arithmetic sequence is $5, 10$.

5 has 2 divisors: 1 and 5.
10 has 4 divisors: $1, 2, 5$, and 10.

The sum of 2 and 4 is 6, which is the answer.

In the second test case, the series in question is $8, 16, 24$. These numbers have $4, 5$, and 8 divisors, respectively and $4 + 5 + 8 = 17$.

In the third test case, the series in question is $11, 22, 33, 44, 55, 66, 77$. These numbers have $2, 4, 4, 6, 4, 8$ and 4 divisors respectively, for a sum of $2 + 4 + 4 + 6 + 4 + 8 + 4 = 32$.