Problem Wrong Modulo

Input file `stdin`
Output file `stdout`

Andu made a terrible mistake! Just like the time he headed to Neamț and ended up in Târgu Neamț instead of Piatra Neamț, he made a similar mistake at school. He thought that $(a \cdot x) \ \% \ (a \cdot y) = x \ \% \ y$.

Task

Still curious, he asked himself: *given two integers N and a, how many pairs (x, y) with $1 \leq x, y \leq N$ exist such that $(a \cdot x) \ \% \ (a \cdot y) = x \ \% \ y$?*

Input

Each test contains multiple test cases. The first line of input contains a single integer T, representing the number of test cases.

Each test case consists of one line, containing two space-separated integers N and a.

Output

For each test case, print the number of pairs (x, y) that satisfy the conditions from the statement.

Restrictions

- $1 \leq T \leq 1\,000$
- $1 \leq N, a \leq 1\,000\,000\,000$

#	Points	Restrictions
1	0	Example
2	10	$N, a \leq 100$
3	25	$T \leq 100,\ N, a \leq 1\,000\,000$
4	10	$N, a \leq 4\,000\,000$
5	40	$T \leq 100$
6	15	No further restrictions.

Examples

Input file	Output file
6 4 2 13 1 7 6 9 8 1 1000 1000000000 30030	8 169 16 23 1 20877697634

In the first test case, the pairs that satisfy the conditions from the statement are: $(1, 1)$, $(2, 2)$, $(2, 1)$, $(3, 3)$, $(3, 1)$, $(4, 1)$, $(4, 2)$ and $(4, 4)$.

In the second test case, all $13^2 = 169$ pairs satisfy the conditions from the statement.