Problem L: Looking at Divisors Time Limit: 5 seconds

Description

Let $\mathbf{d}(\mathbf{n})$ be the sum of all divisors of \mathbf{n} . For example $\mathbf{d}(6)=1+2+3+6=12$. Given integers \mathbf{n} and \mathbf{k} , compute the sum of all integers \mathbf{m} for $1 \le \mathbf{m} < \mathbf{n}$, such that $\mathbf{d}(\mathbf{m})$ is a multiple of \mathbf{k} , i.e. $\mathbf{d}(\mathbf{m}) = \mathbf{l} * \mathbf{k}$, where \mathbf{l} is a positive integer.

Input

A number of of inputs (\leq **100**), each start with the number of value of integers **n**, **k** (1 \leq **n**,**k** \leq 10000000).

Output

Output the answer modulo **100000007**.

Sample Input 10 5 20 5

Sample Output 8

0 27