Anubis wants to know how many

Anubis is always playing with numbers. Recently he wanted to know how many numbers there are in the range [1, N] that are even and multiples of **p**. What about helping him? Write a program that automates this task.

Input

The first line of input contains **T** (1 <= **T** <= 100), the number of test cases. T lines follow. Each test case is fully contained in a single line. A test case is represented by two space-separated integers **N** (1 <= **N** <= 1024) and **p** (1 <= **p** <= **N**).

Output

For each test case, output its answer in a single line.

Example

Input:
1

10 5

Output:
1