Problem Factorial Digits

Time Limit 3 second

Problem

Given an integer N can you find the number of digits in N!.

N! = N * (N-1) * (N-2) ….. * 2 * 1

Input

The first line of input an integer T $1 \leq T \leq 10^5$ denoting the number of testcases. Then T number of lines an integer N, $1 \leq N \leq 10^5$

Output

For each T lines output the number of digits in the value N!.

Sample Input 1	Sample Output 1
3 1 5 10	1 3 7