5. Factorial

Program Name: Factorial.java Input File: factorial.dat

A factorial of a non-negative integer is obtained by multiplying it by each of the non-negative integers leading up to it. For example, 4-factorial, also written as 4!, is equal to 1 x 2 x 3 x 4 = 24. Factorials become very large very quickly. Here are two cases:

```
10! = 3628800
100!  =
933262154439441526816992388562667004907159682643816214685929638952175999932299
156089414639761565182862536979208272237582511852109168640000000000000000000000
00
```

The number of trailing zeroes for 10! is 2. The number of trailing zeroes for 100! is 24. In this problem, you will be given some number *n*, and you will determine the number of trailing zeroes for *n*-factorial.

Input

The first line will consist of a single positive integer *n* that will denote the number of lines of data to follow. The following *n* lines will each consist of a single positive integer m, which will be between 1 and 10,000 inclusive.

Output

You should print the number of trailing zeroes for the factorial of each of the given *n* integers.

Constraints

```
1 <= n <= 10
1 <= m <= 10000
```

Example Input File

```
5
25
103
78
249
34
```

Example Output to Screen

```
6
24
18
59
7
```