

Project Euler #5: Smallest multiple



This problem is a programming version of [Problem 5](#) from [projecteuler.net](#)

2520 is the smallest number that can be divided by each of the numbers from **1** to **10** without any remainder.

What is the smallest positive number that is evenly divisible (divisible with no remainder) by all of the numbers from **1** to N ?

Input Format

First line contains T that denotes the number of test cases. This is followed by T lines, each containing an integer, N .

Constraints

- $1 \leq T \leq 10$
- $1 \leq N \leq 40$

Output Format

Print the required answer for each test case.

Sample Input

```
2
3
10
```

Sample Output

```
6
2520
```

Explanation

- You can check **6** is divisible by each of $\{1, 2, 3\}$, giving quotient of $\{6, 3, 2\}$ respectively.
- You can check **2520** is divisible by each of $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$ giving quotient of $\{2520, 1260, 840, 630, 504, 420, 360, 315, 280, 252\}$ respectively.