

The least common multiple (LCM) of a set of positive integers is the smallest positive integer which is divisible by all the numbers in the set. For example, the LCM of 5, 7 and 15 is 105.

Input

Input will consist of multiple problem instances. The first line of the input will contain a single integer indicating the number of problem instances. Each instance will consist of a single line of the form $m\ n_1\ n_2\ n_3\ \dots\ n_m$ where m is the number of integers in the set and $n_1\ \dots\ n_m$ are the integers. All integers will be positive and lie within the range of a 32-bit integer.

Output

For each problem instance, output a single line containing the corresponding LCM. All results will lie in the range of a 32-bit integer.

Sample Input

```
2
3 5 7 15
6 4 10296 936 1287 792 1
```

Sample Output

```
105
10296
```