

Problem B

Largest Three Companions

Time limit: 1 seconds

Karen is studying particle collision reaction, where each particle has an integral score, positive or negative. The scores range from -1000 to 1000. When particles collide, the scores of involved particles are multiplied. Karen wants to find out which three of the particles can yield the largest product. Write a program to find the largest product.

Input Format

The first line of the input gives the number of test cases, T ($T \leq 5$). For each test case, the first line consists of one positive integer N ($3 \leq N < 1000$), indicating the number of particles. Then follows a line with N integers, separated by space(s), ranging from -1000 to 1000.

Output Format

For each test case, output the answer in a separate line.

Sample Input

```
2
3
1 3 2
4
1 -3 1 5
```

Sample Output for the Sample Input

```
6
5
```