/***Day 77 coding Statement :

You are given an array A of N elements. For any ordered triplet (i,j,k) such that i, j, and k are pairwise distinct and 1≤i,j,k≤N, the value of this triplet is (Ai?−Aj?)·Ak?. You need to find the maximum value among all possible ordered triplets.***/

```
import java.util.*;
import java.lang.*;
import java.io.*;

Class Main
{
public static void main (String[] args) throws java.lang.Exception
{
 BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
 int t=Integer.parseInt(br.readLine());
 while(t-->0)
 {
 int n=Integer.parseInt(br.readLine());
 String s=br.readLine();
 String sr[]=s.split(" ");int ar[]=new int[n];
 for (int i=0;i<n ;i++)
 ar[i]=Integer.parseInt(sr[i]);
 Arrays.sort(ar);long cout=Integer.MIN_VALUE;
 cout=(long)(ar[n-1]-ar[0])*ar[n-2];
 System.out.println(cout);
 }
}
}
```