Asteroid Zapper

Filename: asteroids
Time limit: 45 seconds

The Problem

It's the year 3000 and Earth is in danger from... asteroids! Several are headed towards earth. The scientists at NASA have designed an asteroid zapping machine. It's very powerful: in a single shot, it can zap all asteroids that lie on a given plane. Since using it is extremely expensive, the NASA scientists have hired you to determine the maximum number of asteroids that can be zapped in a single shot. For the purposes of this problem, assume that each asteroid is a point.

The Input

The first line of the input will contain a single positive integer, c ($c \leq 100$), representing the number of asteroid scenarios to evaluate. The test cases follow. The first line of each test case will contain a single positive integer, n ($n \leq 150$), representing the number of asteroids for that test case. The next n lines contain three space-separated integers, x, y, and z ($-10^6 \leq x, y, z \leq 10^6$), representing the location of each of the asteroids. You are guaranteed that no three of the points will be collinear.

The Output

For each asteroid scenario, output the maximum number of asteroids that can be zapped in one shot with NASA's asteroid zapping machine, on a line by itself.

Sample Input

```
2
3
3 7 8
2 1 9
-3 4 5
5
3 4 0
-4 9999 0
6 -5 0
1 2 3
-2 -1 0
```

Sample Output

```
3
4
```