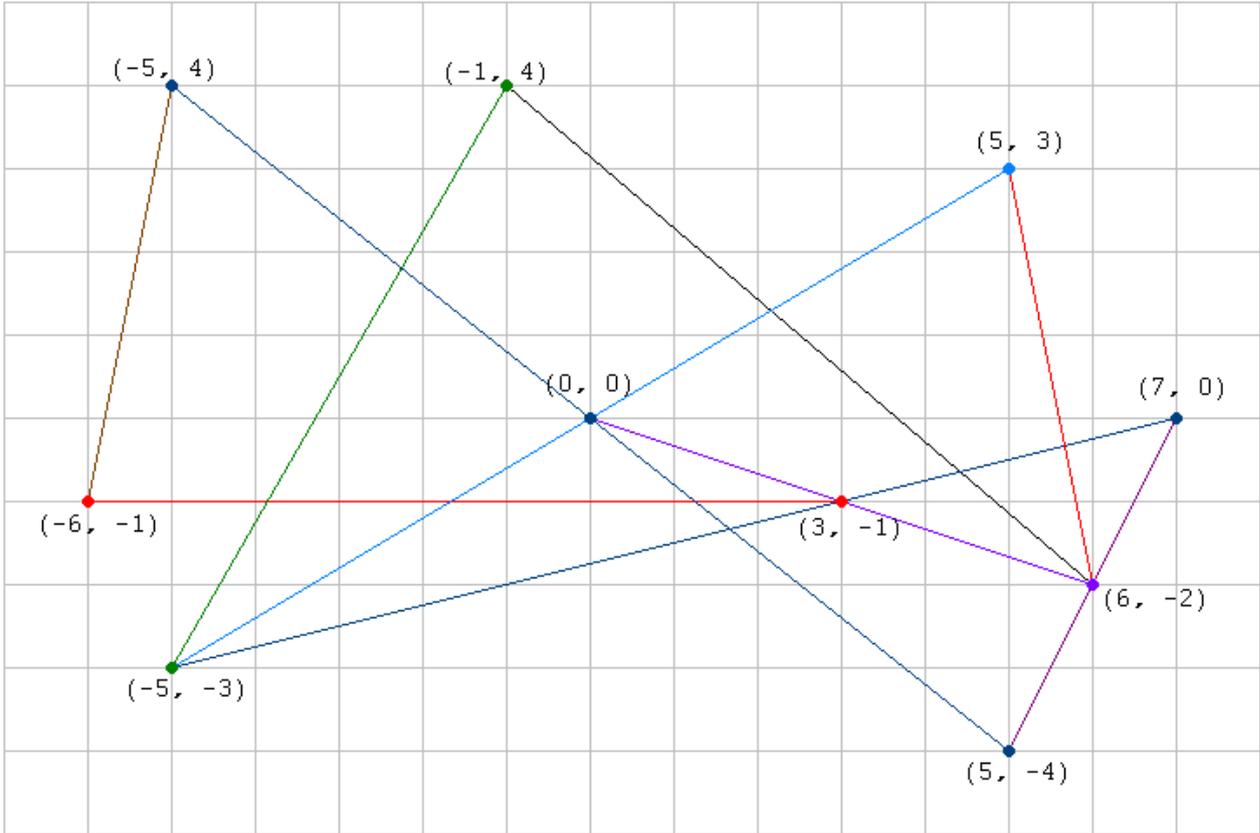


# 10979 How many triangles?

How many triangles are there in the following figure?



... ding! Time's up. The answer is 29.

Given at most 10 line segments, you are to **write a program** that counts the number of triangles bounded by them. Note that three colinear points do **not** make a triangle.

### Input

Input consists of several test cases. Each case begins with a line containing an integer  $N$  ( $3 \leq N \leq 10$ ). The following  $N$  lines each gives four integers,  $x_1, y_1, x_2$  and  $y_2$ , meaning that you draw a straight line segment from  $(x_1, y_1)$  to  $(x_2, y_2)$ . All the coordinates given have their absolute values no greater than 100.

Input is terminated by EOF.

### Output

For each case, output the number of triangles bounded by the  $N$  lines.

### Sample Input

```
10
-5 4 5 -4
```

-5 4 -6 -1  
-5 -3 -1 4  
-5 -3 5 3  
-5 -3 7 0  
-1 4 6 -2  
0 0 6 -2  
6 -2 5 3  
7 0 5 -4  
-6 -1 3 -1

**Sample Output**

29