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Chef and The Right Triangles

Problem Code: **RIGHTRI**

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The Chef is given a list of **N triangles**. Each triangle is identified by the coordinates of its three corners in the 2-D cartesian plane. His job is to figure out **how many of the given triangles are right triangles**. A right triangle is a triangle in which one angle is a 90 degree angle. The vertices of the triangles have integer coordinates and all the triangles given are valid(three points aren't colinear).

Input

The first line of the input contains an integer **N** denoting the number of triangles. Each of the following **N** lines contain six space separated integers **x1 y1 x2 y2 x3 y3** where (**x1**, **y1**), (**x2**, **y2**) and (**x3**, **y3**) are the vertices of a triangle.

Output

Output one integer, the number of right triangles among the given triangles.

Constraints

- $1 \leq N \leq 100000$ (10^5)
- $0 \leq x1, y1, x2, y2, x3, y3 \leq 20$

Example

Input :

```
5
0 5 19 5 0 0
17 19 12 16 19 0
5 14 6 13 8 7
0 4 0 14 3 14
0 2 0 14 9 2
```

Output :

```
3
```

Explanation

The first triangle and the last two triangles of the example are right triangles.

All submissions for this problem are available.

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Tester:	5★ rubanenko
Editorial:	https://discuss.codechef.com/problems/RIGHTRI
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Languages:	CPP14, C, JAVA, PYTH 3.6, PYTH, CS2, ADA, PYP3, TEXT, PAS fpc, RUBY, PHP, NODEJS, GO, TCL, HASK, PERL, SCALA, BASH, JS, PAS gpc, BF, LISP sbcl, CLOJ, LUA, D, CAML, ASM, FORT, FS, LISP clisp, SCM guile, PERL6, CLPS, WSPC, ERL, ICK, NICE, PRLG, ICON, PIKE, SCM qobi, ST, NEM

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