

Momo's Homework

問題描述：

After playing, Momo remembers that she need to do her homework! There are T problems in Momo's homework. In each problem, there are three points in 2D plain, Momo's mission is to report the total score of the triangle!

0 point : If the three point can't form a triangle.

1 point : The triangle is isosceles triangle.

2 point : The triangle is equilateral triangle.

4 point : The triangle is right triangle.

8 point : The triangle is obtuse triangle.

16 point : The triangle is acute triangle.

輸入說明：

Input begins with an integer $T(1 \leq T \leq 1000)$, the number of test case. Each test case would be in the following format.

Line 1 : $x_1 y_1 x_2 y_2 x_3 y_3$ ($0 \leq x_1, y_1, x_2, y_2, x_3, y_3 \leq 100000$)

輸出說明：

Each test case outputs one line, which is the total score of the triangle.

範例：

| Sample Input: | Sample Output: |
|---|----------------|
| 3 0 0 0 3 4 0 0 0 4 0 2 4 0 0 10 0 5 1 | 4 17 9 |