Check if given four points form a square

Given coordinates of four points in a plane, find if the four points form a square or not.

Input:

The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. The first line of each test case contains 4 space separated integer points a, b, c, d

Output:

For each test case print 1 if the four points form a square else print 0. Remember to output the answer of each test case in a new line.

Constraints:

Example:

Input:

2 20 20 20 10 10 20 10 10 10 10 10 10 20 10 20 30

Output:

1