## Valid Square

You're given 4 points on a 2D plane. You need to find the if these 4 points construct a square or not. The side of the square should be of a non-zero length.

**Input:**

The first line represents the x and y coordinates of the 1st point separated by space.
The second line represents the 2nd point, third line represents the 3rd point and fourth line represents the 4th point.

**Output:**

Print, true if the points construct a square, else print false.

Constraints:

Co-ordinates of x and y:
$-10^6 < x, y < 10^6$

**Sample**:

| No. | Sample Input | Sample Output |
|---|---|---|
| 1 | 0 0<br>1 1<br>0 1<br>1 0 | true |
| 2 | 0 0<br>1 1<br>0 1<br>1 12 | false |
| 3 | 0 4<br>0 -4<br>-3 0<br>3 0 | false |