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https://codefights.com/img/coins_new.png1000

You are given 3 points on the Cartesian plane that form a triangle. Find the area of this triangle.

**Example**

* TriangleCoordinates([[2, 7], [12, 7], [6, 17]]) = 50
* TriangleCoordinates([[-182, -152], [-192, -141], [-164, -138]]) = 169
* TriangleCoordinates([[0, 0], [3, 0], [2, 8]]) = 12
* **[input] array.array.integer n**

A matrix of three elements, where each element is an array of two elements, the x and the y coordinates respectively. -300 < n[i][j] < 300.

* **[output] float**

The area of the triangle.

<https://codefights.com/challenge/hJiKGccgkgvLwTxBg>

Explicación: <https://www.youtube.com/watch?v=hC2zIrc8Tyo>

double TriangleCoordinates(int[][] n)

{

double det = (n[0][0] \* n[1][1] + n[1][0] \* n[2][1] + n[2][0] \* n[0][1] )

- (n[1][0] \* n[0][1] + n[2][0] \* n[1][1] + n[0][0] \* n[2][1]);

return Math.Abs( det) / 2;

}