

If (0,3) translates to (-3,-2) then (2,5) translates to what?

Answer:

In **Euclidean geometry**, a **translation** is a function that moves every point a constant distance in a specified direction.

A translation is the operation changing the positions of all points (x, y, z) of an object according to the formula

$$(x, y, z) \rightarrow (x+dx, y+dy, z+dz)$$

So, in given case:

$$(0, 3) \rightarrow (-3, -2)$$

Thus:

$$dx = -3 - 0 = -3$$

and

$$dy = -2 - 3 = -5$$

Thus:

$$(2, 5) \rightarrow (2-3, 5-5) = (-1, 0)$$

Answer: (-1,0)