

Find the coordinates of the image after the reflection in the given line (matrix)

[-3, -1, 0, 4, 7]

[5, -6, 1, 3, 9]

$y = -x$

SOLUTION

The coordinates $(x; y)$ after the reflection in the given line $y = -x$ move to $(-y; -x)$

$(-3; 5) \rightarrow (-5; 3)$;

$(-1; -6) \rightarrow (6; 1)$;

$(0; 1) \rightarrow (-1; 0)$;

$(4; 3) \rightarrow (-3; -4)$;

$(7; 9) \rightarrow (-9; -7)$;

$$\begin{vmatrix} -3 & -1 & 0 & 4 & 7 \\ 5 & -6 & 1 & 3 & 9 \end{vmatrix} \Rightarrow \begin{vmatrix} -5 & 6 & -1 & -3 & -9 \\ 3 & 1 & 0 & -4 & -7 \end{vmatrix}$$