$\Rightarrow$ Rotation, $\Rightarrow$ rotation with an angle Θ clockwise in matrix becomes :

$$\Rightarrow \begin{pmatrix} x'_1 \\ x'_2 \end{pmatrix} = \begin{pmatrix} cos\Theta & sin\Theta \\ -sin\Theta & cos\Theta \end{pmatrix} \begin{pmatrix} x_1 \\ x_2 \end{pmatrix}$$
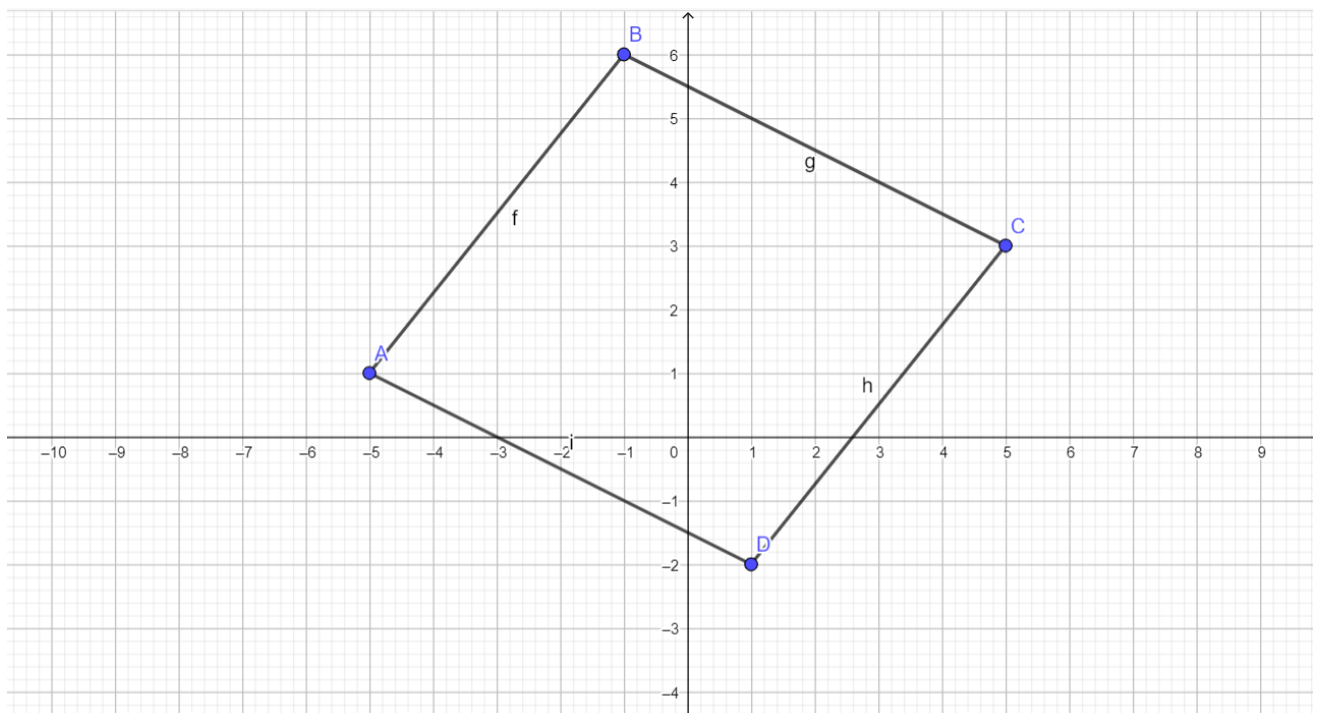
$\Rightarrow$ and for a rotation counterclockwise we have:

$$\Rightarrow \begin{pmatrix} x'_1 \\ x'_2 \end{pmatrix} = \begin{pmatrix} cos\Theta & -sin\Theta \\ sin\Theta & cos\Theta \end{pmatrix} \begin{pmatrix} x_1 \\ x_2 \end{pmatrix}$$

ORIGINAL DRAWING

WE TRANSFORM THE ABOVE DRAW VIA A 45 DEGREE ROTATION IN CLOCKWISE DIRECTION

WITH A',B',C'AND D'