

MATRIX TRANSFORMATIONS

Practice questions:

Describe each matrix transformation using provided statement.

a $\begin{pmatrix} 3 & 0 \\ 0 & 3 \end{pmatrix}$	b $\begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$	c $\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$
d $\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$	e $\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$	f $\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$
g $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$	h $\begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix}$	i $\begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$

Identity matrix

Rotation 180° at origin

Enlargement with scale factor 3 at origin

Rotation about origin at 90° anticlockwise directions

Reflection at x axis

Rotation at origin 270° anticlockwise direction

Reflection at $y = x$

Reflection at $y = -x$

Reflection at y axis

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