

$\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$	$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$	$\begin{pmatrix} 2 & 0 \\ 0 & 1 \end{pmatrix}$	$\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$
$\begin{pmatrix} 2 & 0 \\ 0 & -3 \end{pmatrix}$	$\begin{pmatrix} \cos\theta & -\sin\theta \\ \sin\theta & \cos\theta \end{pmatrix}$	reflection in $y = x$	$\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$
$\begin{pmatrix} \cos 2\theta & \sin 2\theta \\ \sin 2\theta & -\cos 2\theta \end{pmatrix}$	$\begin{pmatrix} 3 & 0 \\ 0 & 1 \end{pmatrix}$	$\begin{pmatrix} -0.5 & \frac{\sqrt{3}}{2} \\ \frac{\sqrt{3}}{2} & 0.5 \end{pmatrix}$	$\begin{pmatrix} 2 & 0 \\ 0 & 2 \end{pmatrix}$
the identity transformation	$\begin{pmatrix} 0.5 & -\frac{\sqrt{3}}{2} \\ -\frac{\sqrt{3}}{2} & -0.5 \end{pmatrix}$	enlargement, scale factor 2, centre (0,0)	$\begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$
$\begin{pmatrix} 1 & 0 \\ 0 & 5 \end{pmatrix}$	reflection in the line $y = (\tan\theta)x$	the matrix which transforms $\begin{pmatrix} 2 & 3 & 4 \\ 1 & 1 & 5 \end{pmatrix}$ to $\begin{pmatrix} 6 & 9 & 12 \\ 1 & 1 & 5 \end{pmatrix}$	stretch in x – direction scale factor 2
reflection in $y = -x$	$\begin{pmatrix} 1 & 0 \\ 0 & 3 \end{pmatrix}$	$\begin{pmatrix} 3 & 0 \\ 0 & 4 \end{pmatrix}$	$\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$

clockwise rotation, 90° , centre $(0,0)$	$\begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix}$	reflection in $y = -\frac{x}{\sqrt{3}}$	$\begin{pmatrix} 2 & 0 \\ 0 & 3 \end{pmatrix}$
$\begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$	reflection in y – axis	reflection in x – axis followed by enlargement scale factor 2 centre $(0,0)$	reflection in x – axis then stretch scale factor 2 in x – direction and stretch scale factor 3 in y – direction
anti – clockwise rotation about the origin through angle θ	stretch in y – direction scale factor 5	the matrix which transforms $\begin{pmatrix} 2 & 3 & 4 \\ 1 & 1 & 5 \end{pmatrix}$ to $\begin{pmatrix} 4 & 6 & 8 \\ 3 & 3 & 15 \end{pmatrix}$	$\begin{pmatrix} 0.5 & \frac{\sqrt{3}}{2} \\ \frac{\sqrt{3}}{2} & -0.5 \end{pmatrix}$
the matrix which transforms $\begin{pmatrix} 2 & 3 & 4 \\ 1 & 1 & 5 \end{pmatrix}$ to $\begin{pmatrix} 2 & 3 & 4 \\ 3 & 3 & 15 \end{pmatrix}$	reflection in $y = \sqrt{3}x$	reflection in y – axis followed by enlargement scale factor 3 centre $(0,0)$	stretch scale factor 3 in x – direction and stretch scale factor 4 in y – direction
reflection in x – axis	$\begin{pmatrix} 2 & 0 \\ 0 & -2 \end{pmatrix}$	anticlockwise rotation of 90° , centre $(0,0)$	reflection in $y = -\sqrt{3}x$
reflection in $y = \frac{x}{\sqrt{3}}$	$\begin{pmatrix} -3 & 0 \\ 0 & 3 \end{pmatrix}$	$\begin{pmatrix} -0.5 & -\frac{\sqrt{3}}{2} \\ -\frac{\sqrt{3}}{2} & 0.5 \end{pmatrix}$	rotation of 180° centre $(0,0)$