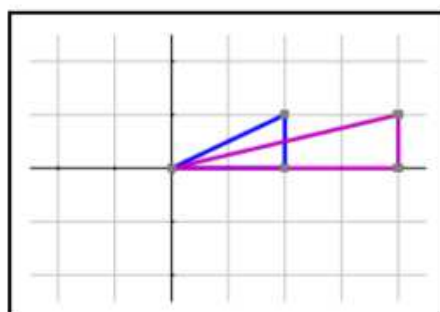
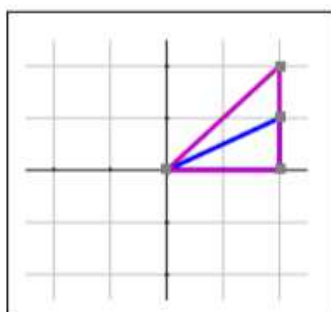
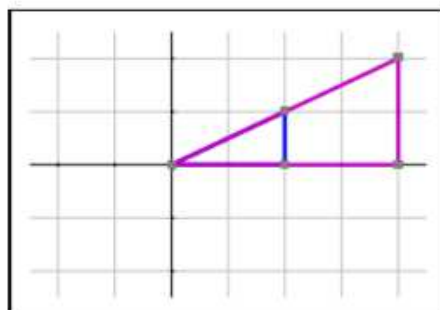
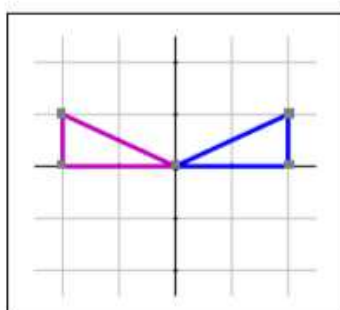
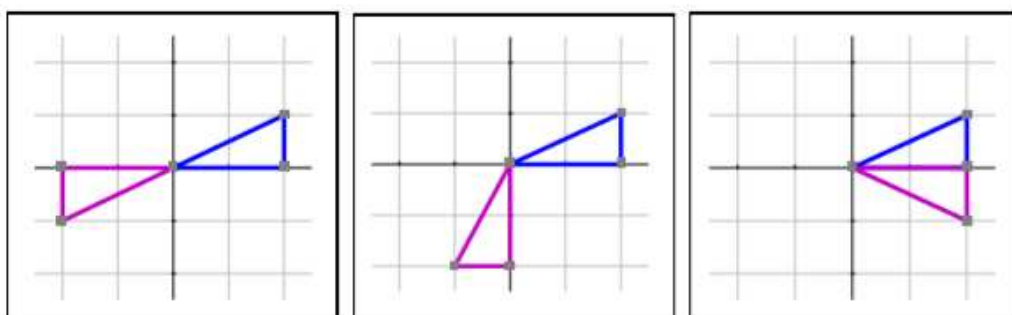
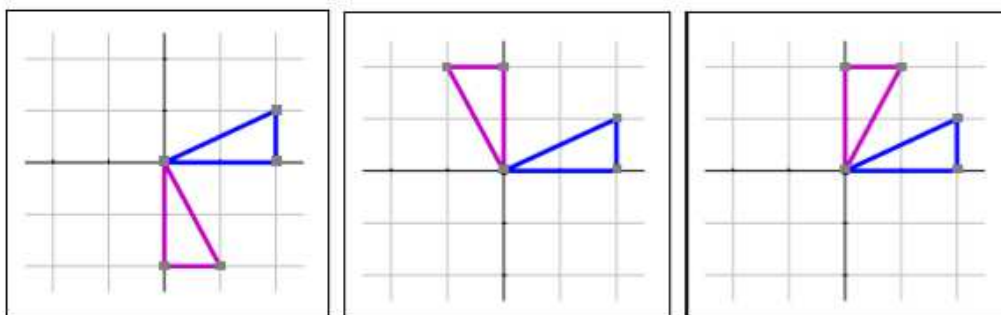


Matrix Matchings

Cut out the diagrams, descriptions of transformations and matrices and match up each diagram with the appropriate transformation and the matrix which describes it.



Rotation by 90° clockwise	$\begin{pmatrix} 1 & 0 \\ 0 & 2 \end{pmatrix}$
Rotation by 90° anticlockwise	$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$
Reflection in y -axis	$\begin{pmatrix} 2 & 0 \\ 0 & 1 \end{pmatrix}$
Reflection in x -axis	$\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$
Reflection in the line $y = x$	$\begin{pmatrix} 2 & 0 \\ 0 & 2 \end{pmatrix}$
Reflection in the line $y = -x$	$\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$
Rotation by 180°	$\begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$
Enlargement with scale factor 2, centre the origin	$\begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix}$
Stretch with scale factor 2, in the direction of the x -axis	$\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$
Stretch with scale factor 2, in the direction of the y -axis	$\begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$