## Linear transformations with Matrices less on 6 - Rotate a point ${\bf N}$ degrees about the origin

## Magic Monk Tutorials

- 1 State the transformation matrix for an anticlockwise rotation about the origin of:
- 1.1 45 degrees.
- 1.2 120 degrees.
- 2 Find the transformation matrix for clockwise rotation about the origin.

- 3 Rotate the point  $P = \begin{pmatrix} 1 \\ 3 \end{pmatrix}$  by 45 degrees anticlockwise.
- 4 Rotate the point  $P = \begin{pmatrix} -2 \\ -3 \end{pmatrix}$  by 30 degrees clockwise.