**7D Multiple Transformations**

1. The points A(1,0), B(0,1) and C(2,0) are the vertices of a triangle T. The triangle T is rotated 90° anticlockwise around (0,0) and then the image T’ is reflected in the line y = x to obtain the triangle T’’.
2. On separate diagrams, draw T, T’ and T’’
3. i) Find the matrix **P** such that **P**(T) = T’

ii) Find the matrix **Q** such that **Q**(T’) = T’’

1. By finding a matrix product, find the single matrix that will perform a 90° anticlockwise rotation followed by a reflection in y = x
2. The following matrices represent three different transformations:

Find the matrix representing the transformation represented by **R**, followed by **Q**, followed by **P** and give a geometrical interpretation of this transformation.

The matrix represents an enlargement with scale factor followed by an anticlockwise rotation through angle about the origin.

1. Find the value of
2. Find the value of