

**30th November**

Corbettmaths

Expand and simplify fully

$$(3 - x)(x + 4)^2$$

$$y = \frac{4}{x^2}$$

Find  $\frac{dy}{dx}$

Show that

$$(\sin\theta + \cos\theta)^2 + (\sin\theta - \cos\theta)^2 \equiv 2$$

The unit square is transformed by matrix **Q** followed by matrix **R** followed by the matrix **S**

This is equivalent to transforming the unit square by the identity matrix.

Matrix **R** represents a rotation.  
Matrices **Q** and **S** represent reflections.

Write down three possible matrices for **Q**, **R** and **S**