

**8th November**

Corbettmaths

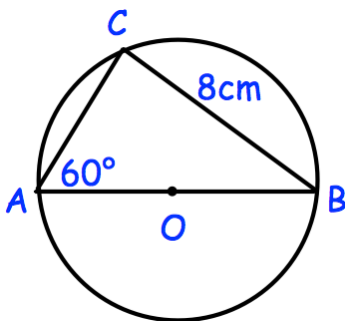
Shape A is translated by vector  $\begin{pmatrix} 3 \\ -1 \end{pmatrix}$  to make Shape B.

Shape B is translated by vector  $\begin{pmatrix} -5 \\ -2 \end{pmatrix}$  to make Shape C.

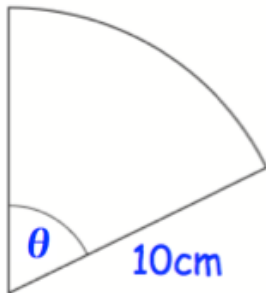
Describe the single transformation that maps Shape C to Shape A

Work out the value of

$$125^{\frac{2}{3}}$$



Find  $AC$ .



The area of the sector is  $27\text{cm}^2$ .  
Find the size of the missing angle.

Write down the equation of a line perpendicular to  $y = 5x + 3$