### 10th May

Show $x^2 - 7x + 1 = 0$ can be rearranged to the form

$$x = 7 - \frac{1}{x}$$

Use the iteration

$$x_{n+1} = 7 - \frac{1}{x_n}$$

to find an approximation solution to $x^2 - 7x + 1 = 0$

Start with $x_1 = 1$

Find the coordinates of the point B

Find the coordinates of the point C

Shown is a circle, centre O. A and B are points on the circle. AC and BC are tangents.

The square of $w$ is 8

Write down the value of $w^3$