

2. In an Argand diagram, the points A and B are represented by the complex numbers $-3 + 2i$ and $5 - 4i$ respectively. The points A and B are the end points of a diameter of a circle C .

- (a) Find the equation of C , giving your answer in the form

$$|z - a| = b \quad a \in \mathbb{C}, b \in \mathbb{R}$$

(3)

The circle D , with equation $|z - 2 - 3i| = 2$, intersects C at the points representing the complex numbers z_1 and z_2

- (b) Find the complex numbers z_1 and z_2

(6)