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7.

$$f(z) = z^4 - 6z^3 + az^2 - 44z + b$$

where a and b are real constants.

Given that $-1 - 3i$ is a root of the equation $f(z) = 0$

(a) write down another complex root of this equation.

(1)

(b) Hence find the other roots of the equation $f(z) = 0$

(6)

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Question 7 continued

Q7

(Total 7 marks)