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2.

$$f(z) = z^3 - 2z^2 + 16z - 32$$

(a) Show that $f(2) = 0$

(1)

(b) Use algebra to solve $f(z) = 0$ completely.

(3)

(c) Show, on a single Argand diagram, all three roots of the equation $f(z) = 0$

(2)

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Question 2 continued

Q2

(Total 6 marks)