10 $$f(x) = 2x^3 - px^2 - 13x - q$$

When $f(x)$ is divided by $(x - 2)$ the remainder is -20

Given that $(x - 3)$ is a factor of $f(x)$

(a) find the value of p and the value of q

(7)

(b) Hence use algebra to solve the equation $f(x) = 0$

(5)

Question 10 continued

Question 10 continued

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Question 10 continued

(Total for Question 10 is 12 marks)