

29 Given that $(x - 5)$ is a factor of $3x^3 - 20x^2 + kx + 10$ where k is a constant,

- (a) use the factor theorem to show that $k = 23$

(2)

- (b) Solve the equation $3x^3 - 20x^2 + 23x + 10 = 0$
Show clear algebraic working.

(4)

(Total for Question 29 is 6 marks)

(TOTAL FOR PAPER IS 100 MARKS)

