

Question			Answer	Marks	AO	Guidance	
2			$\frac{7x - 25}{(x - 1)(x - 4)^2} = \frac{A}{x - 1} + \frac{B}{x - 4} + \frac{C}{(x - 4)^2}$	M1	1.1a	Sets up partial fractions of the correct form	Not dependent on previous M1 Allow for equating coefficients for at least one power of x leading to a value for one of the constants
			$7x - 25 = A(x - 4)^2 + B(x - 1)(x - 4) + C(x - 1)$	M1	1.1	Clears the denominator (for their form with at least two fractions).	
			When $x = 4, 28 - 25 = 3C$ giving $C = 1$ When $x = 1, 7 - 25 = 9A$ giving $A = -2$	M1	1.1	Uses at least one value of x leading to a value for one of the constants (for their form)	
			Equate coefficients of x^2 $0 = A + B$ giving $B = 2$ $\frac{-2}{x - 1} + \frac{2}{x - 4} + \frac{1}{(x - 4)^2}$	A1	1.1	Fully correct expression must be seen SC If $\frac{7x-25}{(x-1)(x-4)^2} = \frac{A}{x-1} + \frac{Bx+C}{(x-4)^2}$ used, award M0 and up to M1 M1 SC B1 for $\frac{7x-25}{(x-1)(x-4)^2} = \frac{-2}{x-1} + \frac{2x-7}{(x-4)^2}$	
				[4]			