Question			Answer	Marks	AO	Guidance
7	**(a)**		$2^3 + 6 \times 2^2 - 2 - 30 = 0$ **so** $(x - 2)$ **is a factor**	**B1**	**1.1**	Factor theorem must be used, and a concluding statement needed Statement might be at the start e.g $f(2) = 0 \Rightarrow (x - 2)$ a factor e.g. Synthetic Division or Long Division is B0 Must see evidence of the substitution- 'show that' so e.g simply $f(2) = 0$ is B0
				[1]		
7	**(b)**		$(x - 2)(x^2 + 8x + 15)$	**M1** **A1**		By inspection or from long division, allow sign errors only Fully correct linear × quadratic
			$(x - 2)(x + 5)(x + 3)$	**A1**	**1.1**	Fully correct and fully factorised
				[3]		
			Alternatively f(k) evaluated, where k is -3 **and** -5 $(x + 3)$ *or* $(x + 5)$ identified as a factor $(x - 2)(x + 5)(x + 3)$	**M1** **A1** **A1**	**1.1a** **1.1**	Allow a slip with either but not both