10			Valid attempt to solve $12x^3 - 24x^2 - 60x + 72 = 0$	**M1**	**3.1a**	eg divide by 12 and find f(k) where k = ±1, ± 2, ±3, ±6	Must see x= -2, 1 and 3 as a minimum for the first 4 marks
			$(x-1), (x-3) or\ (x+2)$ identified	**A1**	**1.1**		
			$(x-1)(x^2 - x - 6)$ **oe**	**M1**	**1.1**	or attempt at long division, allow sign errors	Must see integration
			x-values are $-2, 1$ and 3	**A1**	**1.1**	could be implied from the limits	
			$F[x] = 3x^4 - 8x^3 - 30x^2 + 72x$	**M1**	**2.1**	integration with at least 2 terms correct; may be unsimplified (+c not necessary)	If divided by 12 at the beginning and attempt to integrate twelfth of function then M1A0
				A1	**1.1**	all terms correct and may be unsimplified can have +c	
			F[b] – F[a] or F[c] – F[b]	**M1**	**1.1**	One subtraction attempted where a,b and c are their solutions to original equation	
			189 or –64 seen	**A1**	**1.1**		If divided by 12 earlier and then multiply by 12 at end can achieve all marks
			253	**A1**	**3.2a**		
				[9]			