June 2011

5.	*******	Find the remainder when $6x^3 - 13x^2 + x + 2$ is divided by $x + 3$.		
	(b)	(i) Show that $x - 2$ is a factor of $6x^3 - 13$	[2]	
		(ii) Hence factorise $6x^3 - 13x^2 + x + 2$.	[2]	
			Γ/1	

June 2012

(a)	Given that $f(x) = x^3 - 2x^2 - 9x + 18$, evaluate $f(-3)$.	
	Write down what this tells you about $f(x)$.	
(b)	Factorise $x^3 - 2x^2 - 9x + 18$.	

June 2013

	Find the remainder when $7x^3 - 4x^2 + x - 2$ is divided by $x - 2$.		
(b)	(i) Show that $x + 3$ is a factor of $x^3 + 4x^2 - 17x - 60$.		
	(ii) Hence, factorise $x^3 + 4x^2 - 17x - 60$.		

[4]

10.		Find the remainder when $x^3 + 5x^2 + 2x - 8$ is divided by $x - 3$.		[2]
	(b)	(i)	Show that $x - 1$ is a factor of $x^3 + 5x^2 + 2x - 8$.	[2]
		(ii)	Hence factorise $x^3 + 5x^2 + 2x - 8$.	[4]