1	$12x^3 + 20x^2$	B1	
	Additional Guidance		

2	$-2x$	B1	

Q	Answer	Mark	Comment
3	$2ax^3 + 2x^2 + 4x - 10$ and $bx^2 + cx$ or $2ax^3 + (2 + b)x^2 + (4 + c)x - 10$ or $2a = 12$ or $a = 6$	M1	oe correct expansions allow $2ax^3 = 12x^3$
	$2 + b = 7$ or $b = 5$ or $4 + c = 3$ or $c = -1$	M1	oe equation
	$a = 6$ and $b = 5$ and $c = -1$	A1	SC2 any two of $a = 6$ and $b = 5$ and $c = -1$
	Additional Guidance		
	One correct value without working only scores one mark eg $a = 6$ and $b = -5$ and $c = 1$ with no working eg $a = -6$ and $b = 5$ and $c = 1$ with no working		M1M0A0 M0M1A0
	Condone an incorrect –10 in the expansion if A1 is awarded		M1M1A1

Q	Answer	Mark	Comments
4	$13x + 22$	B2	B1 $15x + 20$ or $-2x + 2$ or $13x + a$ or $bx + 22$, where a and b can be any numbers
	Additional Guidance		
	Do not ignore further working for B2 eg $13x + 22 = 35x$ eg $13x + 22$, $x = \frac{22}{13}$		B1 B1

Q	Answer	Mark	Comments
5	$2x^3 - 18x^2y + 5x^2y - 45xy^2$	M1	exactly 4 terms with 3 correct terms in any order may be seen in a grid implied by $2x^3 - 13x^2y$ with one other term or $-13x^2y - 45xy^2$ with one other term
	$2x^3 - 18x^2y + 5x^2y - 45xy^2$ or $2x^3 - 13x^2y - 45xy^2$	A1	terms in any order do not allow if only seen in a grid
	Additional Guidance		
	A correct term includes the sign (in a grid allow eg $5x^2y$ for $+ 5x^2y$)		
	Condone four correct terms followed by incorrect simplification of x^2y terms, otherwise do not allow further incorrect work eg1 $2x^3 - 18x^2y + 5x^2y - 45xy^2 = 2x^3 + 13x^2y - 45xy^2$ eg2 $2x^3 - 18x^2y + 5x^2y - 45xy^2 = 36x^5y + 5x^2y - 45xy^2$	 M1A1 M1A0
	Allow equivalent fully simplified terms eg $5x^2y$ may be seen as $5yx^2$	
	For M1 allow coefficients to be incorrectly positioned eg $x^32 - 18x^2y + y5x^2 - 45xy^2$	 M1A0
	$2x^3 + - 18x^2y + 5x^2y + - 45xy^2$ has 4 correct terms but needs further simplification to score A1	M1A0
	Terms must be processed eg do not allow $x^2 \times 2x$ for $2x^3$	

Q	Answer	Mark	Comment
6	$6x^5 + 12x^2$	B1	

Q	Answer	Mark	Comments
7	It is true for **all** values of x	B1	