Answers and mark guide

Q	Answer	Working	Marks
1	$x^3 + 4x^2 - 11x - 30$	Expand two brackets first, then multiply by the third.	4
2	$x^3 + 2x^2 - x - 2$	Expand two brackets first, then multiply by the third.	4
3	$x^3 + 3x^2 - 16x - 48$	Expand two brackets first, then multiply by the third.	4
4	$x^3 + x^2 - 8x - 12$	Expand two brackets first, then multiply by the third.	4
5	$x^3 - 3x^2 - 9x + 27$	Expand two brackets first, then multiply by the third.	4
6	$x^3 - 11x^2 + 39x - 45$	Square the first bracket, then multiply.	5
7	$x^3 - x^2 - x + 1$	Square the first bracket, then multiply.	5
8	$x^3 + 10x^2 + 33x + 36$	Square the first bracket, then multiply.	5
9	$x^3 - x^2 - 16x - 20$	Square the first bracket, then multiply.	5
10	$x^3 + 5x^2 - 8x - 48$	Square the first bracket, then multiply.	5
11	$3x^3 - 16x^2 + 25x - 12$	Multiply two brackets, then the third.	5
12	$2x^3 + 12x^2 + 22x + 12$	Multiply two brackets, then the third.	5
13	$3x^3 - 7x^2 - 35x - 25$	Multiply two brackets, then the third.	5
14	$2x^3 - 5x^2 - 4x + 3$	Multiply two brackets, then the third.	5
15	$3x^3 - 14x^2 + 3x + 20$	Multiply two brackets, then the third.	5
16	$4x^3 + 14x^2 + 2x - 20$	Expand step by step and collect like terms.	6
17	$9x^3 - 42x^2 - 35x + 100$	Expand step by step and collect like terms.	6
18	$9x^3 - 6x^2 - 5x + 2$	Expand step by step and collect like terms.	6
19	$9x^3 + 24x^2 + 9x - 6$	Expand step by step and collect like terms.	6
20	$4x^3 - 14x^2 + 14x - 4$	Expand step by step and collect like terms.	6

My score: _____ / **100** Questions 1–15 = 70 marks (Foundation focus)