Answers and mark guide

Q	Answer	Working	Marks
1	**2x + 10**	Multiply every term inside the bracket.	1
2	**56x − 42**	Multiply every term inside the bracket.	1
3	**x^2 + 3x**	Multiply every term inside the bracket.	2
4	**5(4x + 4)**	Take out the highest common factor.	2
5	**5(5x − 3)**	Take out the highest common factor.	2
6	**x^2 − 5x − 36**	Multiply each term in the first bracket by each term in the second, then collect like terms.	3
7	**x^2 + 6x − 27**	Multiply each term in the first bracket by each term in the second, then collect like terms.	3
8	**x^2 − 2x − 8**	Multiply each term in the first bracket by each term in the second, then collect like terms.	3
9	**x(x + 2)**	Common factor x.	2
10	**2x(x + 3)**	Common factor: the number and x.	3
11	**(x − 1)(x − 3)**	Find two numbers that multiply to 3 and add to -4: −1 and −3.	3
12	**(x + 1)(x + 7)**	Find two numbers that multiply to 7 and add to 8: 1 and 7.	3
13	**(x + 1)(x + 1)**	Find two numbers that multiply to 1 and add to 2: 1 and 1.	3
14	**(x + 7)(x + 8)**	Find two numbers that multiply to 56 and add to 15: 7 and 8.	3
15	**(x − 4)(x − 5)**	Find two numbers that multiply to 20 and add to -9: −4 and −5.	3
16	**$12x^2$ − 5x − 25**	Multiply out all four pairs of terms, then collect like terms.	4
17	**(x + 8)(x − 8)**	Difference of two squares.	3
18	**(2x + 4)(2x − 4)**	Difference of two squares: $(px)^2 - n^2$.	4
19	**(2x + 1)(x + 5)**	Find two numbers that multiply to give ac and add to give b, then factorise by grouping.	4
20	**11x + 20**	$x^2 + 8x + 16 - (x^2 - 3x - 4)$	5

My score: _____ / 57 Questions 1–15 = 37 marks (Foundation focus)