Answers and mark guide

Q	Answer	Working	Marks
1	**x + 3**	Factorise the numerator.	3
2	**x + 1**	Divide each term by the common factor.	2
3	**x + 2**	Difference of two squares.	3
4	**5/x**	Cancel numbers and x.	2
5	**x + 5**	Factorise the numerator.	3
6	**2**	Cancel common factors.	3
7	**(3(x + 1))/(x(x + 3))**	Common denominator x(x + b).	4
8	**(3x + 20)/(x(x + 5))**	Common denominator.	4
9	**5/2**	Multiply by the reciprocal.	4
10	**(3)/(x − 1)**	Factorise top and bottom.	4
11	**(2x + 7)/((x + 3)(x + 4))**	Common denominator.	4
12	**(x − 3)/(x + 3)**	Factorise both.	5
13	**1**	All factors cancel.	5
14	**(3x + 5)/((x − 5)(x + 5))**	Common denominator (x − b)(x + b).	5
15	**(x + 4)/(x − 3)**	Factorise top and bottom.	5
16	**8**	Cross-multiply.	5
17	**−7, 1**	Cross-multiply to get a quadratic.	5
18	**Shown**	Common denominator: [(x + a + 1) − (x + a)] / ((x + a)(x + a + 1))	5
19	**(−1)/(x + 4)**	Write a as a(x + c)/(x + c).	5
20	**x**	(x − a) + a	4

My score: _____ / **80** Questions 1–15 = 56 marks (Foundation focus)