Answers and mark guide

Q	Answer	Working	Marks
1	**x = 2, y = 1**	The solution is where the lines cross.	3
2	**x = 3, y = 4**	The solution is where the lines cross.	3
3	**x = 2, y = 2**	The solution is where the lines cross.	3
4	**x = 2, y = 6**	The solution is where the lines cross.	3
5	**x = 1, y = 3**	The solution is where the lines cross.	3
6	**x = 2, y = 5**	Read the crossing point.	3
7	**Yes**	3×2 + -3 = 3	2
8	**Shown**	Both equations give y = 6 when x = 4	3
9	**-1 and 3**	The coefficient of x.	2
10	**y = 3x − 3**	The larger gradient in size.	2
11	**x = -1, y = 1 and x = 3, y = 9**	The curve and line meet at two points.	5
12	**$x^2 - 2x - 3 = 0$**	Move all terms to one side.	3
13	**x = -1 and x = 2**	Factorise.	4
14	**No solutions**	x^2 can never be negative.	2
15	**2 (x = −2 and x = 2)**	Two intersection points	2
16	**x = 4, y = 1**	Draw both lines; check by substitution.	5
17	**(3, 4)**	x + 1 = 7 − x	4
18	**(2, 4)**	−2x + 8 = 3x − 2	5
19	**$x^2 - 6x + 8 = 0$, so x = 2 or x = 4**	(x − 2)(x − 4) = 0	5
20	**They are parallel (same gradient 2) so they never meet**	Equal gradients, different intercepts	4

My score: _____ / 66 Questions 1–15 = 43 marks (Foundation focus)