Answers and mark guide

Q	Answer	Working	Marks
1	**x ≤ 2**	The region is to the left of the line.	2
2	**y ≥ 4**	The region is above the line.	2
3	**x ≤ 5**	The region is to the left of the line.	2
4	**y ≥ 6**	The region is above the line.	2
5	**x ≤ 3**	The region is to the left of the line.	2
6	**x ≥ 1, y ≥ 1**	Left boundary x = 1; lower boundary y = 1	4
7	**x ≥ 1, y ≥ 3**	Left boundary x = 1; lower boundary y = 3	4
8	**x ≥ 2, y ≥ 1**	Left boundary x = 2; lower boundary y = 1	4
9	**x ≥ 1, y ≥ 2**	Left boundary x = 1; lower boundary y = 2	4
10	**x > 1, y > 2**	Left boundary x = 1; lower boundary y = 2	4
11	**x > 2, y > 3, x + y < 8**	Third line: y = 8 − x, region below it	5
12	**x ≥ 3, y ≥ 1, x + y ≤ 8**	Third line: y = 8 − x, region below it	5
13	**x ≥ 3, y ≥ 1, x + y ≤ 8**	Third line: y = 8 − x, region below it	5
14	**x ≥ 3, y ≥ 1, x + y ≤ 9**	Third line: y = 9 − x, region below it	5
15	**x ≥ 3, y ≥ 3, x + y ≤ 9**	Third line: y = 9 − x, region below it	5
16	**10**	List the integer points that satisfy all three inequalities.	5
17	**6**	The greatest value is on the boundary line (or just inside).	5
18	**Yes**	3 + 4 = 7 compared with 9	4
19	**Draw it as a dashed line**	Solid for ≤ and ≥; dashed for < and >	2
20	**y < 2x + 1 (or y ≤ 2x + 1 if the line is included)**	Below the line means y is smaller.	3

My score: _____ / **74** Questions 1–15 = 55 marks (Foundation focus)