Answers and mark guide

Q	Answer	Working	Marks
1	**2/3**	1 − P(rain)	1
2	**1/4**	1/2 × 1/2	2
3	**7/12**	1 − 5/12	2
4	**1/2**	2, 3, 5	2
5	**3/5**	Add the probabilities	2
6	**9/20**	Multiply	3
7	**25**	150 × 1/6	2
8	**1/9**	1/3 × 1/3	3
9	**30**	150 × 1/5	3
10	**1/9**	(3,6),(4,5),(5,4),(6,3)	3
11	**P(A and B) = 1/6; P(A or B) = 2/3**	P(A or B) = P(A) + P(B) − P(A and B)	5
12	**1/4**	1/2 × 1/2	4
13	**11/36**	1 − 25/36	5
14	**8/27**	$2/3^3$	5
15	**16/52 = 4/13**	13 hearts + 3 other kings	4
16	**3/8**	3 × $(1/2)^3$	5
17	**7/15**	4/10 × 3/9 + 6/10 × 5/9 = 12/90 + 30/90	5
18	**10**	500 × 0.02	3
19	**1/5**	P(B) = P(A and B) ÷ P(A)	5
20	**5/12**	15 of 36 outcomes	5

My score: _____ / 69 Questions 1–15 = 46 marks (Foundation focus)