

1. The table below shows the probabilities of choosing a counter from a bag.
 The value of yellow to green is in a ratio of 2:1
 There are 8 yellow counters.
 How many red counters are there

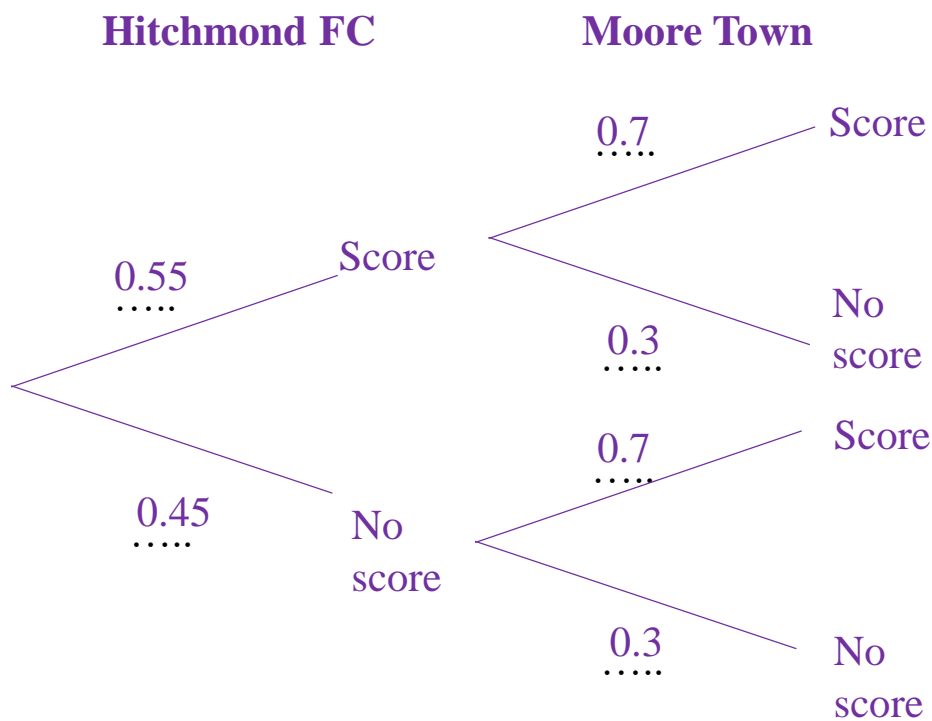
Red	Black	Green	Yellow
0.4	0.3	0.1	0.2

16 counters 12 counters 4 counters 8 counters

.....
 16 counters

 (3 marks)

2. Lucas has calculated his probability of scoring against certain teams.
 The probability he will score against Hitchmond FC is 0.55
 The probability he will score against Moore Town is 0.7
 (a) Draw a tree diagram to show this.



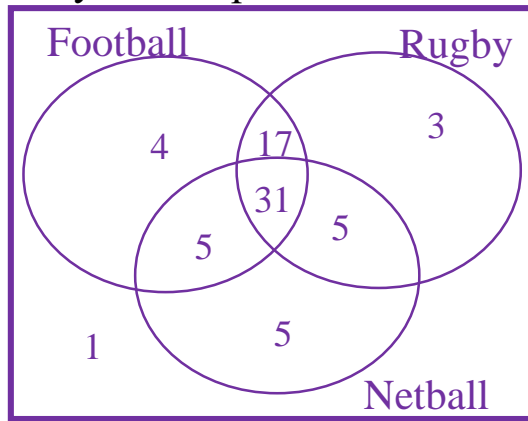
(2 marks)

- (b) Work out the probability he will not score against either team.

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 0.135

 (2 marks)

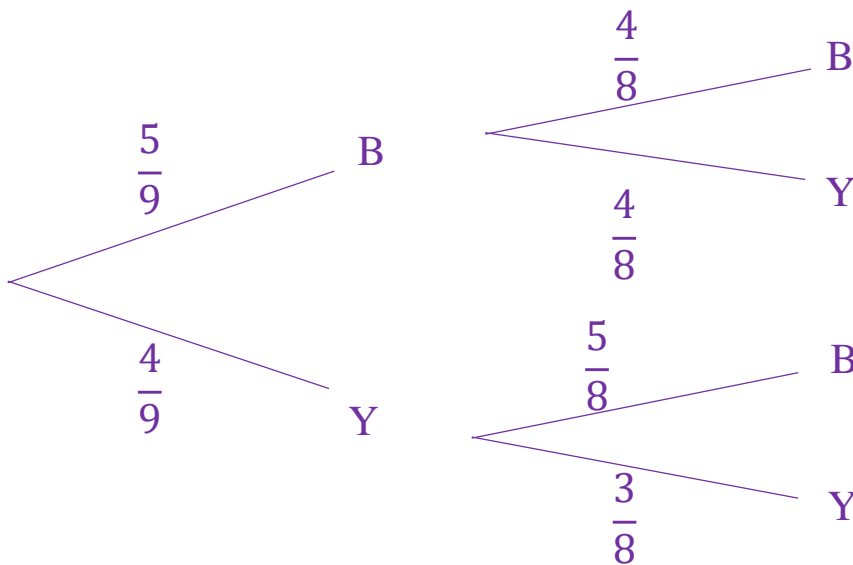
3. Laura asked 80 people what their favourite sport was.
 31 people liked all three sports
 48 people liked football and rugby
 45 people liked football and netball
 5 people liked netball and rugby, but not football
 4 people only liked football
 5 people only liked netball
 All together 56 people liked rugby.
 How many didn't like any of the sports?



.....
 4 people
 (4 marks)

2. There are 5 blue counters and 4 yellow counters in a bag.
 One counter is taken out, not replaced.
 A second counter is then taken.

(a) Draw a tree diagram to display this information.



(2 marks)

- (b) Work out the probability that at least one is a yellow.

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 $\frac{13}{18}$
 (3 marks)

Score =