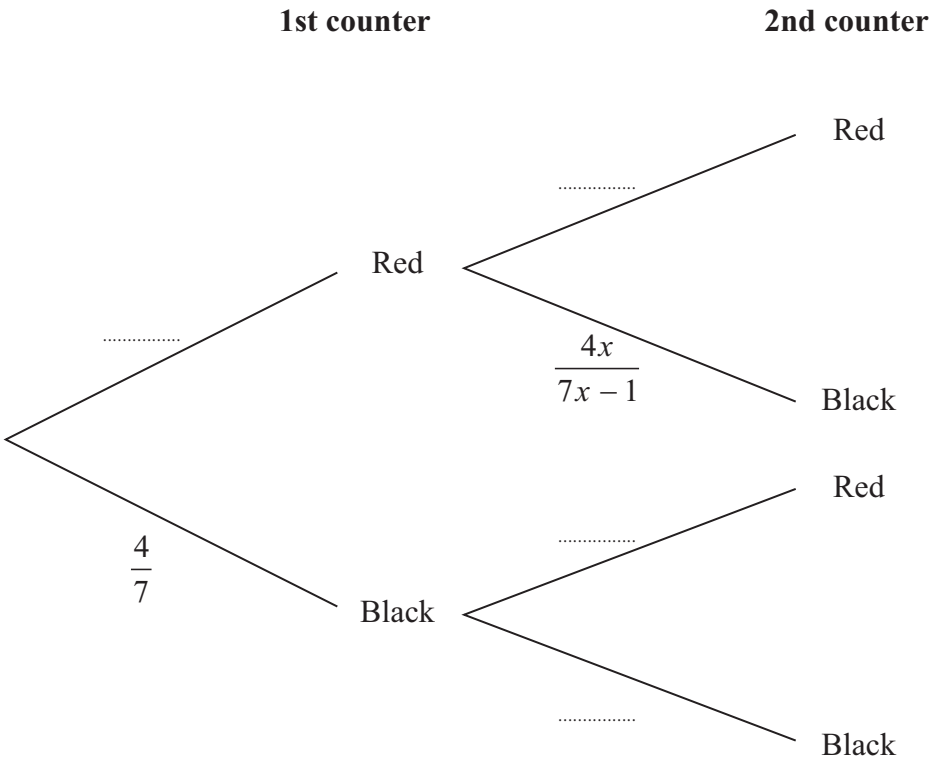
5. There are $7x$ counters in a box.

The box contains red and black counters only, in the ratio 3 : 4

Two counters are selected at random, one at a time without replacement, from the box.

(a) Complete the tree diagram for this information.



(3)

The probability that the two counters selected are different colours is $\frac{32}{63}$

(b) Find the total number of counters in the box before the two counters are selected.

(4)

Given that the second counter is red,

(c) find the probability that the first counter is black.

(3)

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Question 5 continued

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Question 5 continued

(Total for Question 5 is 10 marks)