4. A bag contains a large number of coloured counters. Each counter is labelled A, B or C

30% of the counters are labelled A
45% of the counters are labelled B
The rest of the counters are labelled C

It is known that

2% of the counters labelled A are red
4% of the counters labelled B are red
6% of the counters labelled C are red

One counter is selected at random from the bag.

(a) Complete the tree diagram on the opposite page to illustrate this information.

(2)

(b) Calculate the probability that the counter is labelled A and is not red.

(2)

(c) Calculate the probability that the counter is red.

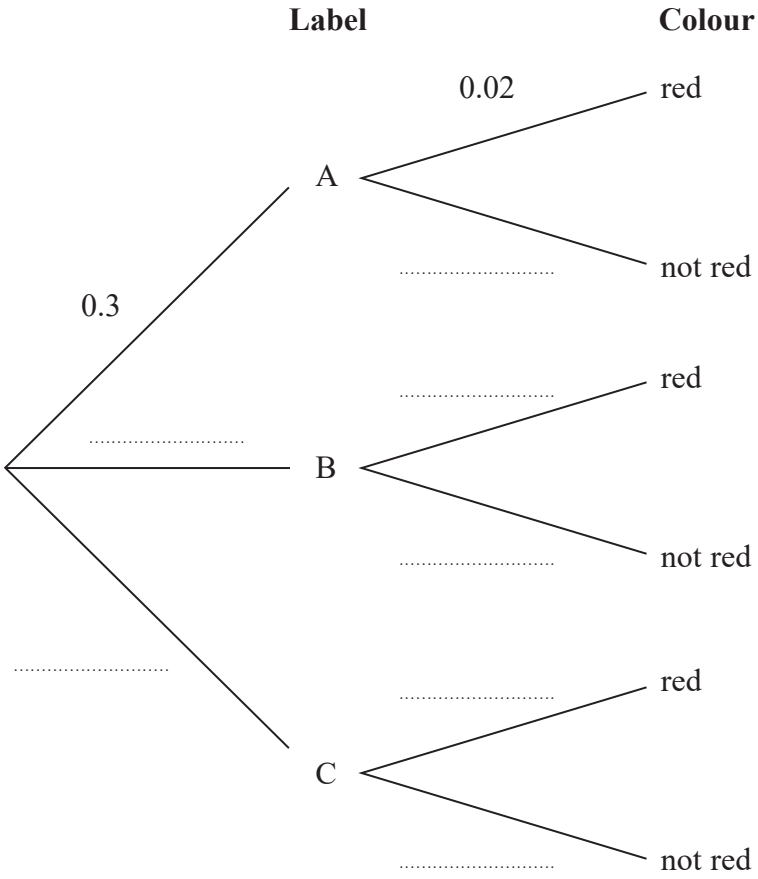
(2)

(d) Given that the counter is red, find the probability that it is labelled C

(3)

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Question 4 continued



(Total for Question 4 is 9 marks)

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