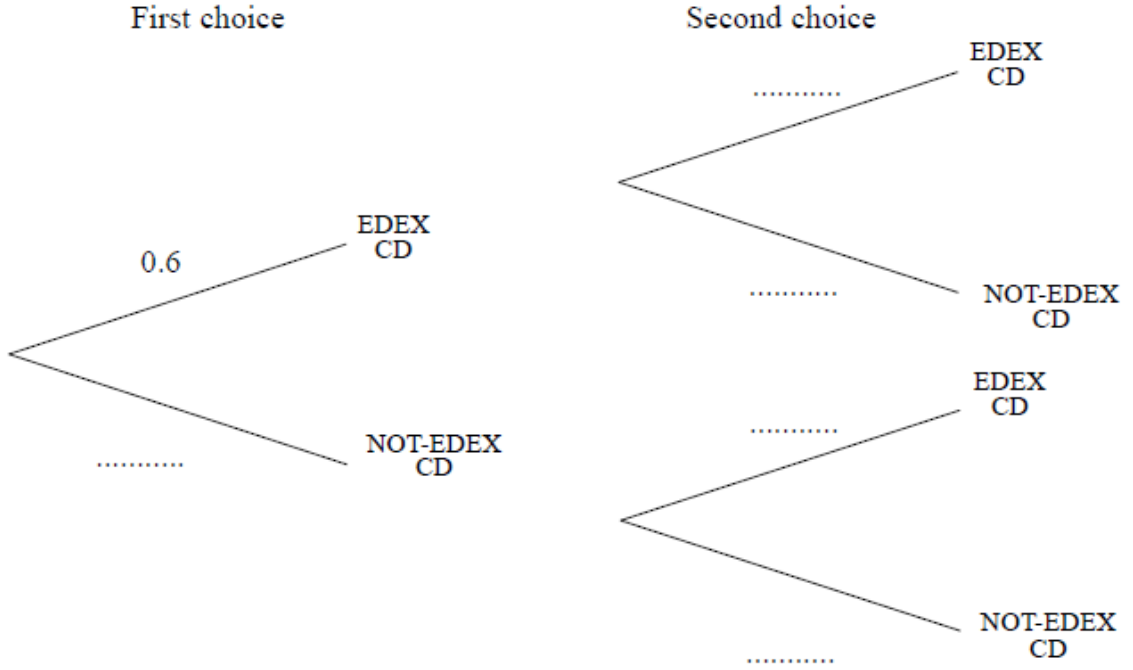
Revision – Probability Tree Diagrams

1.

Amy has 10 CDs in a CD holder.
Amy's favourite group is Edex.
She has 6 Edex CDs in the CD holder.

Amy takes one of these 10 CDs at random.
She writes down whether or not it is an Edex CD.
She puts the CD back in the holder.
Amy again takes one of these 10 CDs at random.

(a) Complete the probability tree diagram.



(2)

(b) Find the probability that Amy will pick two Edex CDs.

.....

(2)

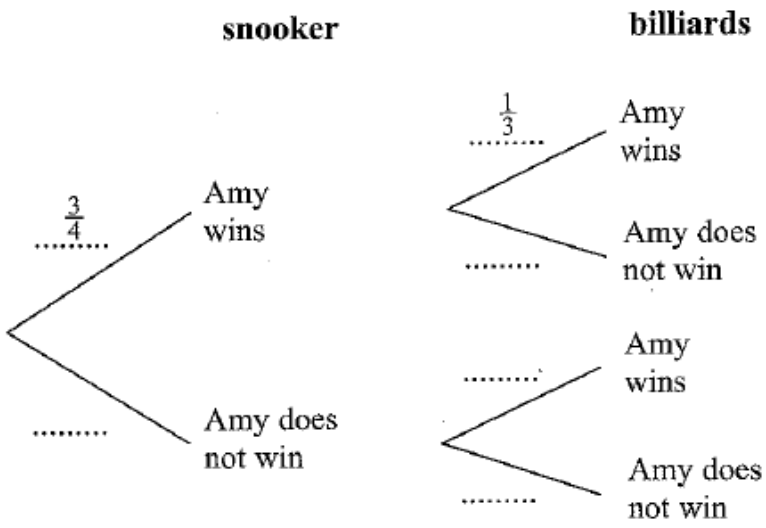
2.

Amy is going to play one game of snooker and one game of billiards.

The probability that she will win the game of snooker is $\frac{3}{4}$

The probability that she will win the game of billiards is $\frac{1}{3}$

(a) Complete the probability tree diagram.



(2)

(b) Work out the probability that Amy will win **exactly** one game.

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(3)

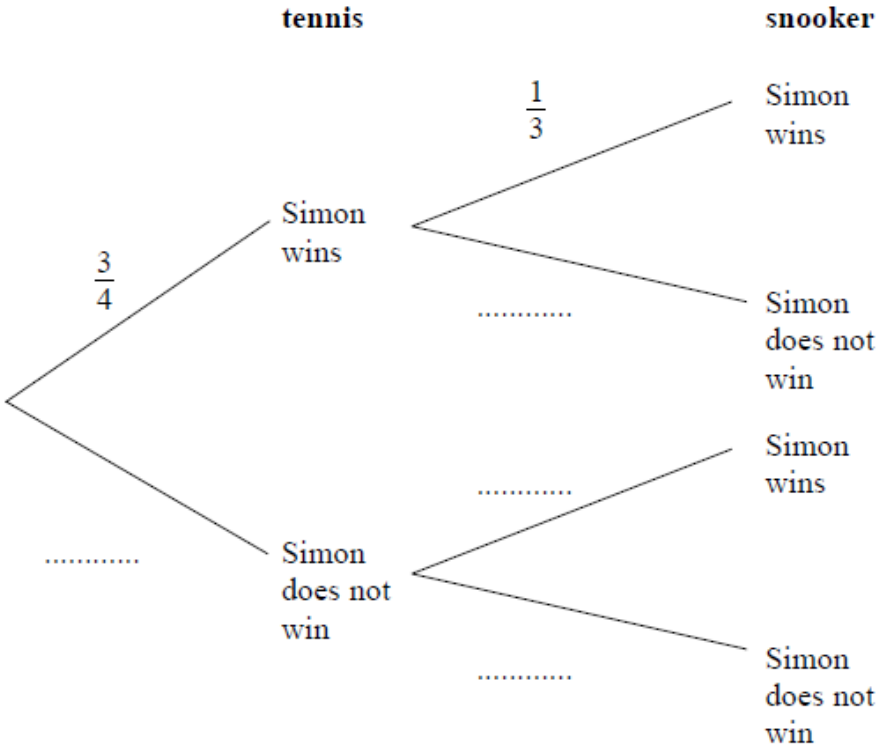
3.

Simon plays one game of tennis and one game of snooker.

The probability that Simon will win at tennis is $\frac{3}{4}$

The probability that Simon will win at snooker is $\frac{1}{3}$

(a) Complete the probability tree diagram below.



(2)

(b) Work out the probability that Simon wins both games.

.....

(2)

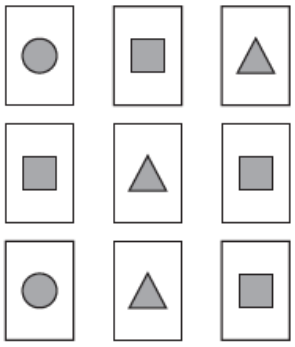
(c) Work out the probability that Simon will win only one game.

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(3)

4.

Here are 9 cards.
Each card has a shape on it.



In a game the cards are turned over so that the shapes are hidden.
The cards are then mixed up.

Katie turns over at random two of the cards.

Work out the probability that these two cards have different shapes on them.
You must show all your working.

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(4)

5.

Fiza has 10 coins in a bag.
There are three £1 coins and seven 50 pence coins.

Fiza takes at random, 3 coins from the bag.

Work out the probability that she takes exactly £2.50

(4)

6.

There are three different types of sandwiches on a shelf.

There are

4 egg sandwiches,
5 cheese sandwiches
and 2 ham sandwiches.

Erin takes at random 2 of these sandwiches.

Work out the probability that she takes 2 different types of sandwiches.

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(5)