

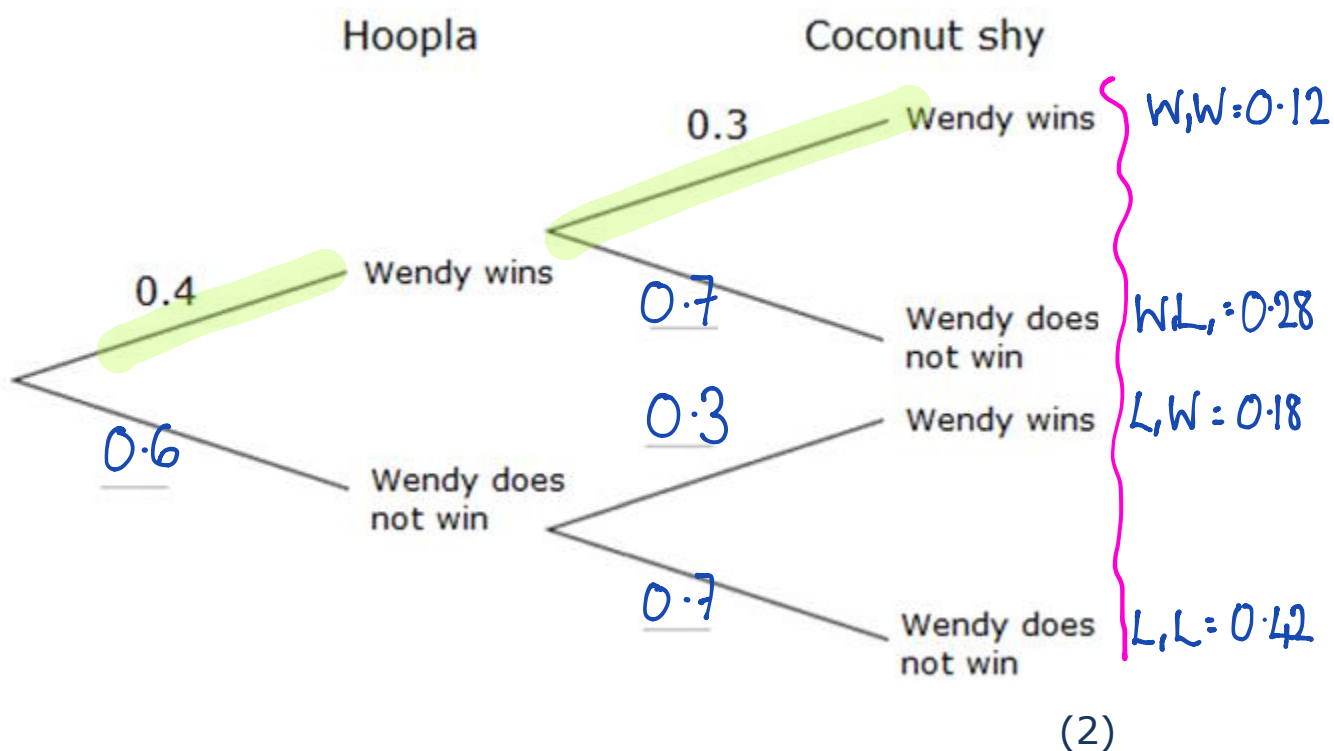
Wendy goes to a fun fair.
She has one go at Hoopla.
She has one go on the Coconut shy.

The probability that she wins at Hoopla is 0.4

The probability that she wins on the Coconut shy is 0.3

I like to list my outcomes at the end of every tree.
...you'll see what I mean...

a) Complete the probability tree diagram.



b) Work out the probability that Wendy wins at Hoopla and also wins on the Coconut shy.

$$W,W = 0.4 \times 0.3 = 0.12$$

Make sure you know how to multiply decimals.
... what is 0.2×0.3 ?
check the next page

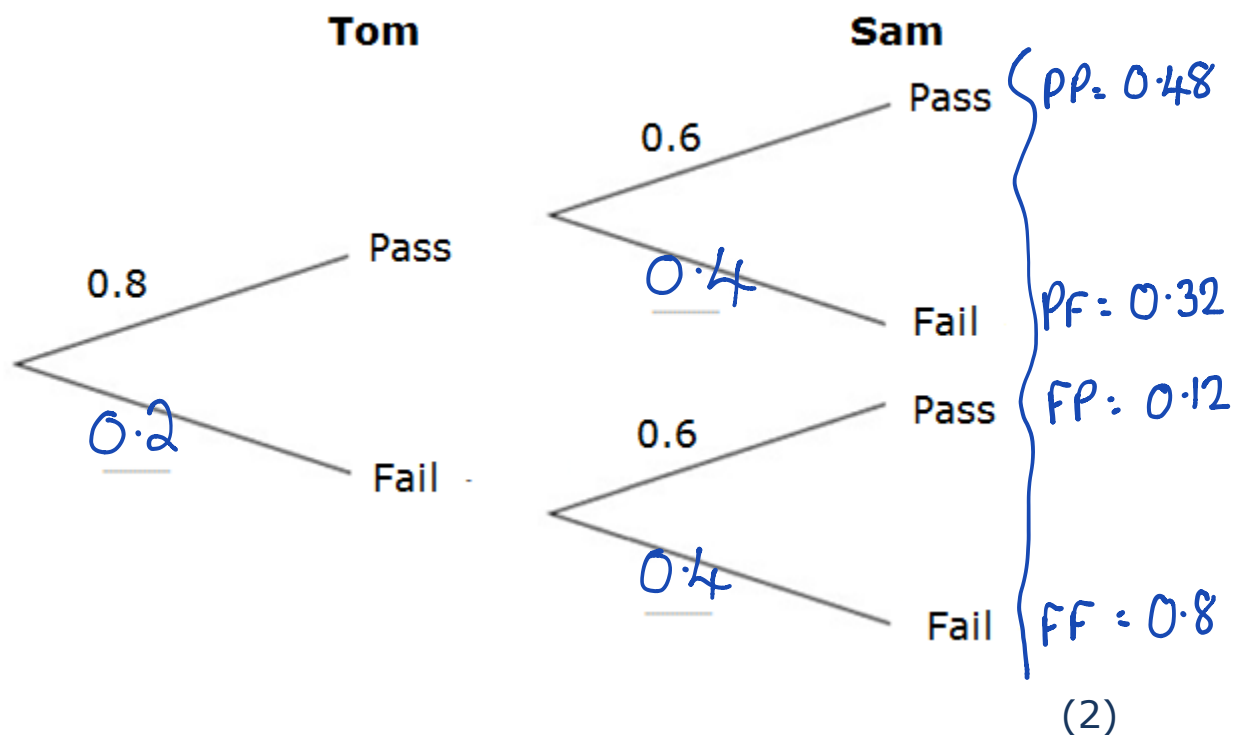
(2)

Tom and Sam each take a driving test.

The probability that Tom will pass the driving test is 0.8

The probability that Sam will pass the driving test is 0.6

a) Complete the probability tree diagram.



b) Work out the probability that both Tom and Sam will pass the driving test.

$$P,P = 0.8 \times 0.6 = 0.48$$

(2)

c) Work out the probability that only one of them will pass the driving test.

$$P,F = 0.32$$

$$F,P = 0.12$$

$$\underline{\underline{0.44}}$$

(3)

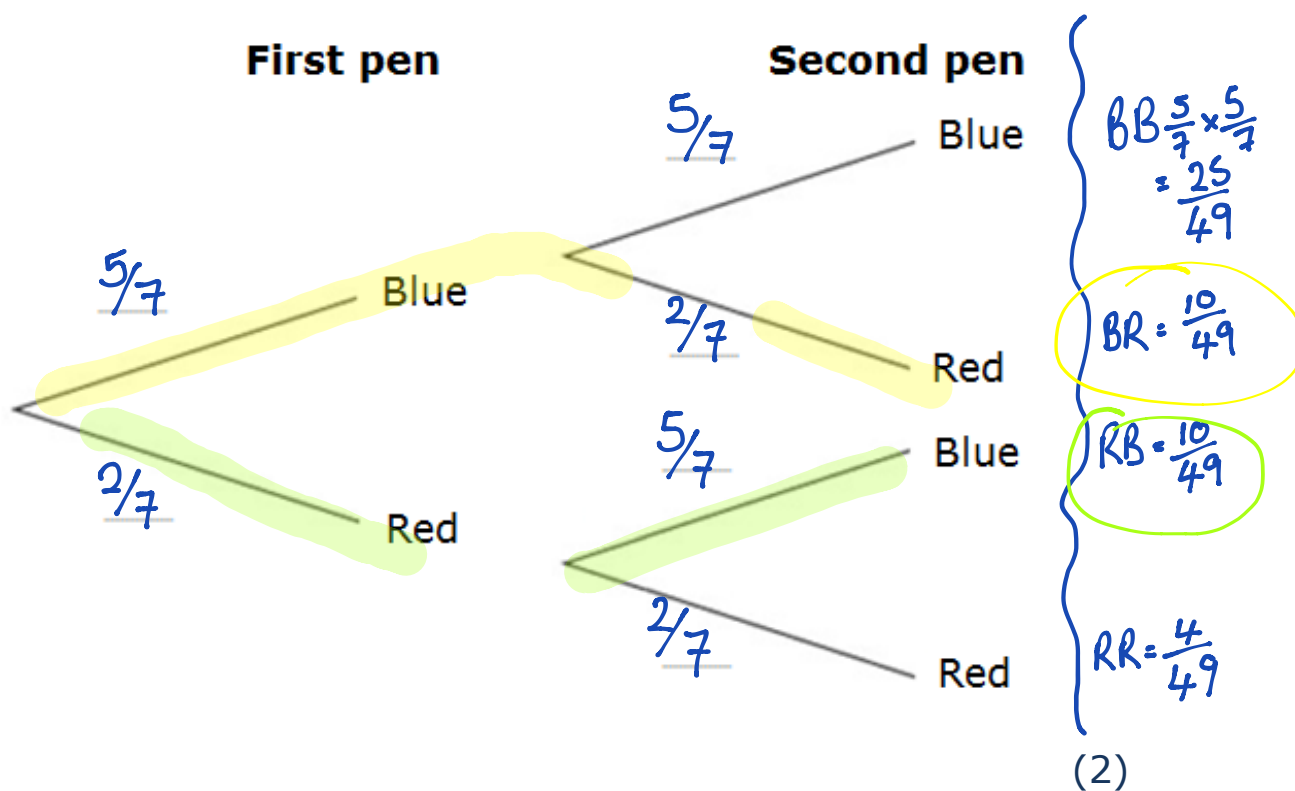
Emma has 7 pens in a box.
5 of the pens are blue.
2 of the pens are red.

Emma takes at random a pen from the box and writes down its colour.

Emma puts the pen back in the box.

Then Emma takes at random a second pen from the box and writes down its colour.

a) Complete the probability tree diagram.



b) Work out the probability that Emma takes exactly one pen of each colour from the box.

it will be B,R or R,B $\frac{10}{49} + \frac{10}{49} = \frac{20}{49}$

(3)