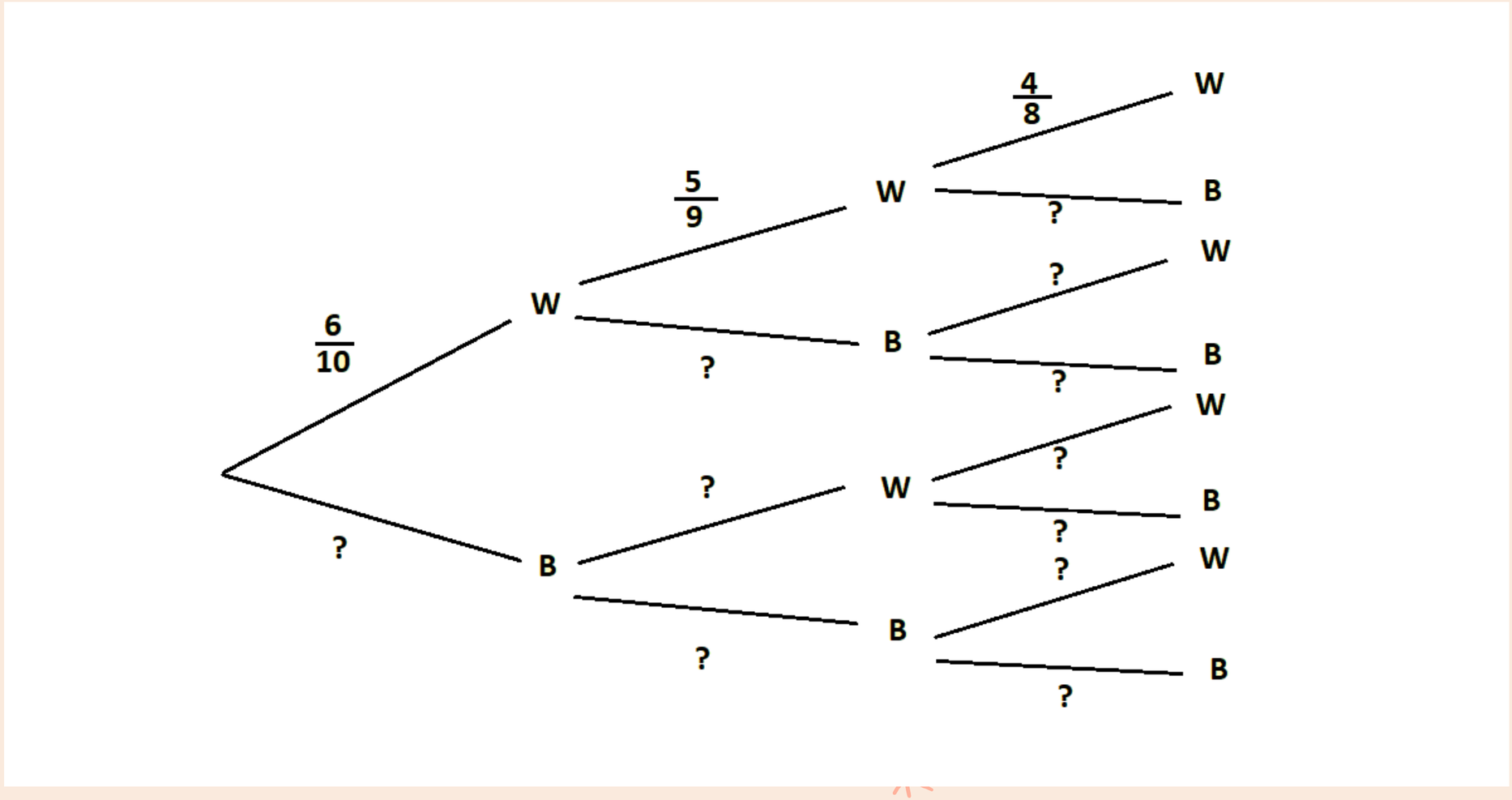
LAST BUT NOT LEAST

1. A box contains six white balls and four black balls. Three balls are selected at random.

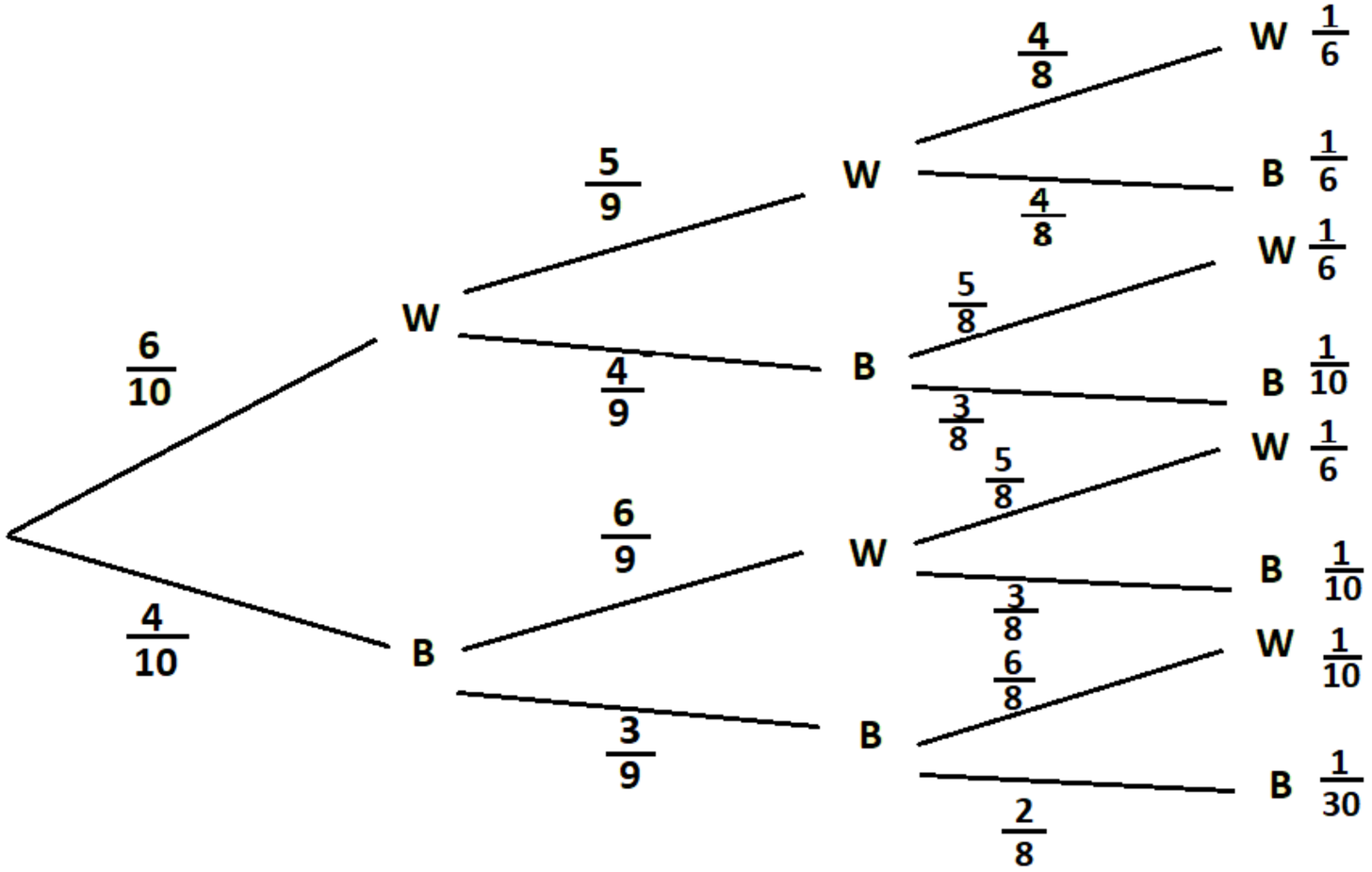
a) Copy and complete the tree diagram of possible outcomes

1.

A box contains six white balls and four black balls. Three balls are selected at random.



Try to do first row by yourself :)


6/10
4/10
W
B
5/9
4/9
6/9
3/9
W
B
W
B
4/8
4/8
5/8
3/8
5/8
3/8
6/8
2/8
W 1/6
B 1/6
W 1/6
B 1/10
W 1/6
B 1/10
W 1/10
B 1/30

1. A box contains six white balls and four black balls. Three balls are selected at random.

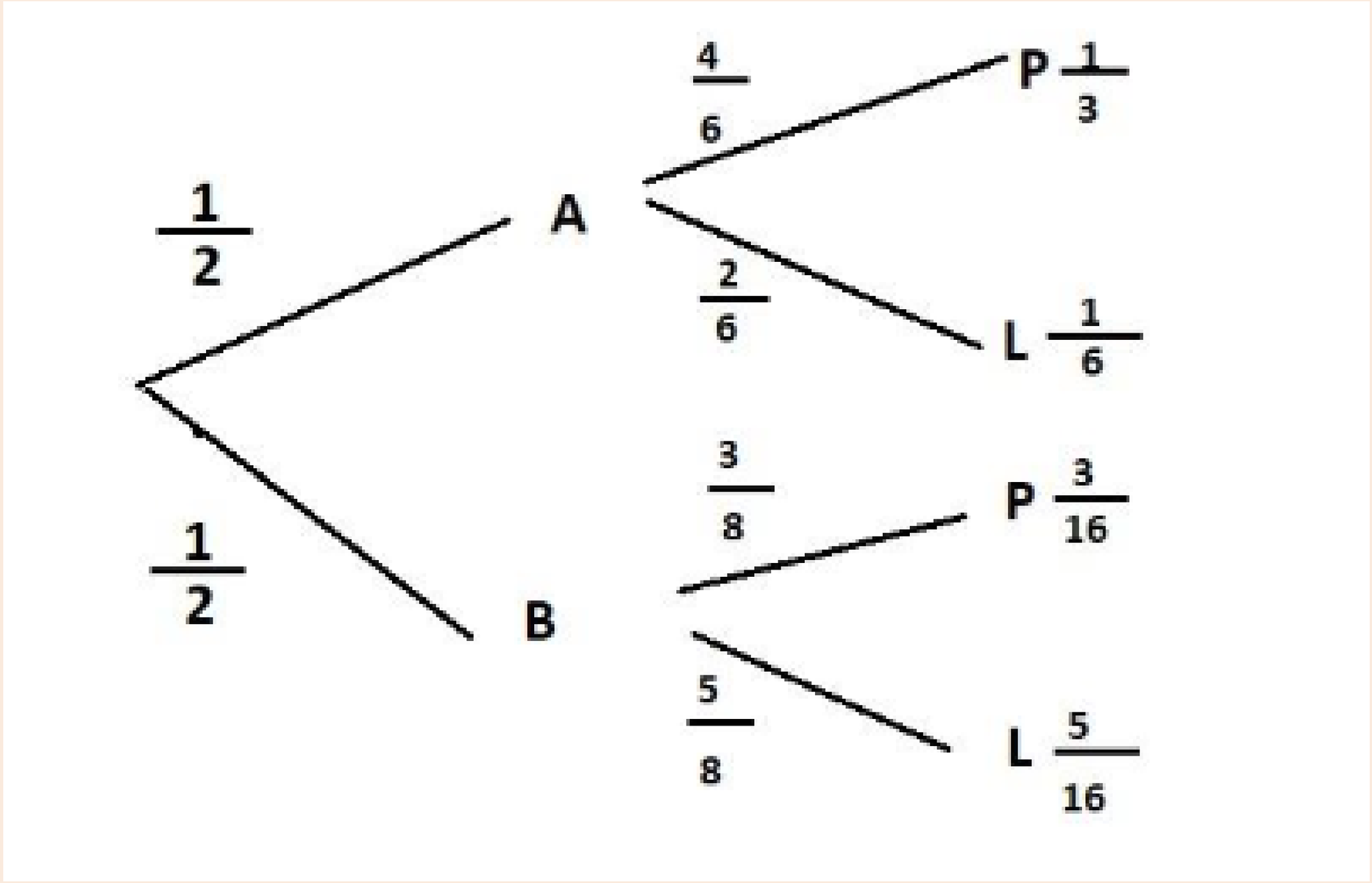
b) Find the probablity that two of the selected balls are white and the othe is black

Answer :

1/6+1/6+1/6=1/2

2. Two sacks , A and B , each contain a mixture of plastic and leather rugby balls. Sack A contains four plastic balls and two leather balls , and sack B contains three plastic balls and five leather balls . A sack is selected at random and a ball is taken from it.

a) Represent this information on tree diagram.


1/2
A
4/6
P 1/3
2/6
L 1/6
1/2
B
3/8
P 3/16
5/8
L 5/16

2. Two sacks , A and B , each contain a mixture of plastic and leather rugby balls. Sack A contains four plastic balls and two leather balls , and sack B contains three plastic balls and five leather balls . A sack is selected at random and a ball is taken from it.

b) Calculate the probability that the ball is leather

Answer :

1/6+5/16=23/48

Thank you for your attention!!