## Tree Diagrams Revision

## (a)

Allie and Alex play two games of tennis. The probability of Allie winning the game is 0.45 .
(a) Complete the tree diagram.

## 2nd Game


(b) Find the probability that Alex wins both matches.

$$
0.3025
$$

(c) Find the probability that Allie and Alex win one match each.
0.495
(b)

Yusuf spins two fair spinners, $A$ and $B$. Spinner A can land on a 1, 2 or 3. Spinner $B$ can land on a 2,3 or 4.
(a) Draw a tree diagram.

## Spinner B


(b) Find the probability that the total on the spinners is an odd number.

$$
5 \times \frac{1}{3} \times \frac{1}{3}=\frac{5}{9}
$$

## (c)

There are 10 biscuits in a tin. 7 are digestives and 3 are bourbons. Temi takes a biscuit at random from the tin and eats it. She does this two more times. Calculate the probability that she has eaten at least two digestives.


$$
\begin{aligned}
& \text { P(at least two digestives) } \\
& \begin{array}{c}
=\frac{210}{720}+\frac{126}{720}+\frac{126}{720}+\frac{126}{720} \\
=\frac{588}{720} \\
=\frac{49}{60}
\end{array}
\end{aligned}
$$

