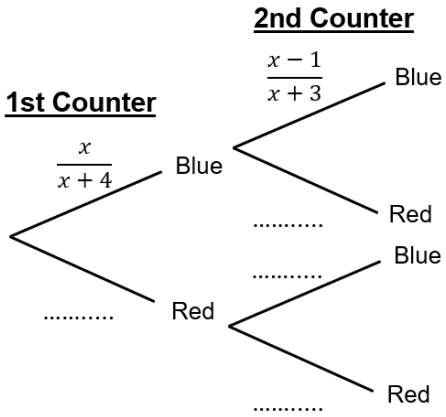
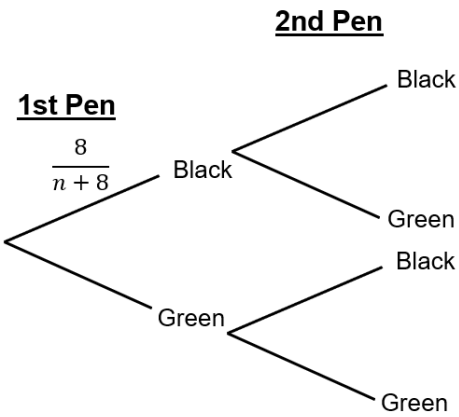


# Fill in the Blanks

# Tree Diagrams for Dependent Events

Question	Tree Diagram	Probability
<p>There are <math>x</math> blue counters and 4 red counters in a bag. Two counters are chosen at random without replacement. Complete the tree diagram and find expressions for each of the probabilities.</p>		<p><math>P(BB) = \frac{x}{x+4} \times \frac{x-1}{x+3}</math></p> <p><math>P(BR) = \quad \times</math></p> <p><math>P(RB) = \quad \times</math></p> <p><math>P(RR) = \quad \times</math></p>
<p>There are 8 black pens and <math>n</math> green pens in a pencil case. Gloria chooses two pens at random from the pencil case. Complete the tree diagram and find expressions for each of the probabilities.</p>		<p><math>P(BB) = \frac{8}{n+8} \times</math></p> <p><math>P(BG) = \quad \times</math></p> <p><math>P(GB) = \quad \times</math></p> <p><math>P(GG) = \quad \times</math></p>
<p>There are <math>n</math> biscuits in a tin. There are some digestives and five shortbreads. Ayyan takes two biscuits from the tin at random and eats them. Draw a tree diagram and find expressions for each of the probabilities.</p>		<p><math>P(DD) = \quad \times</math></p> <p><math>P(DS) = \quad \times</math></p> <p><math>P(SD) = \quad \times</math></p> <p><math>P(SS) = \quad \times</math></p>
<p>A jar contains <math>x</math> lime sweets and some pear sweets. The number of pear sweets is one more than the number of lime sweets. Two sweets are chosen at random. Draw a tree diagram and find expressions for each of the probabilities.</p>		<p><math>P(LL) = \quad \times</math></p> <p><math>P(LP) = \quad \times</math></p> <p><math>P(PL) = \quad \times</math></p> <p><math>P(PP) = \quad \times</math></p>