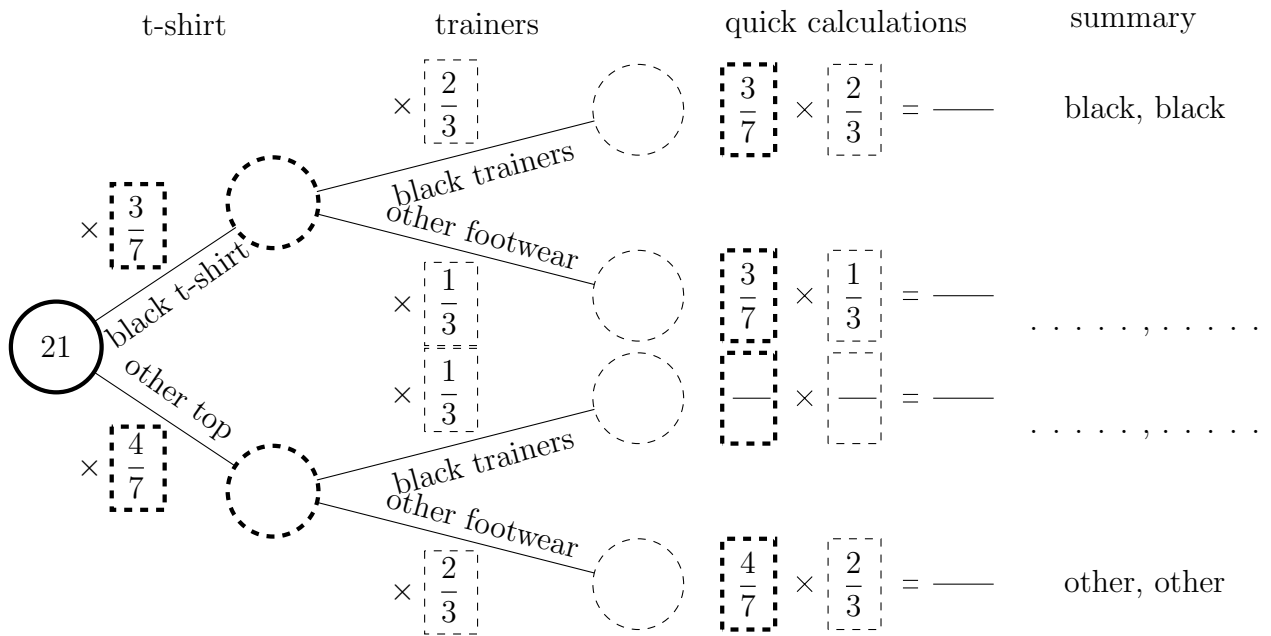


1. The probability Inaya wears a black t-shirt is  $\frac{4}{7}$

When Inaya wears a black t-shirt the probability she wears black trainers is  $\frac{2}{3}$

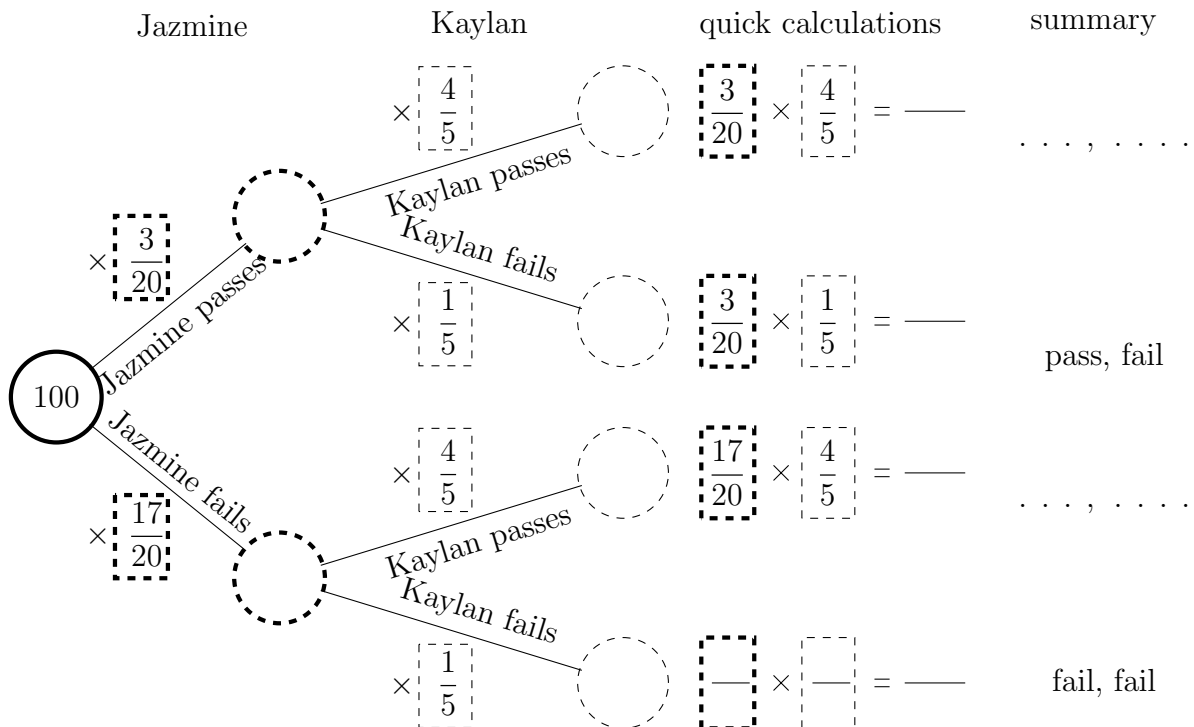
When Inaya doesn't wear a black t-shirt the probability she wears black trainers is  $\frac{1}{3}$

a) Complete the tree, quick calculations and outcome summary.



b) Work out the probability of Inaya wearing a black t-shirt without black trainers . . . .

2. a) Complete the tree, quick calculations and outcome summary.



b) Work out the probability of both Jazmine and Kaylan failing the swimming test.

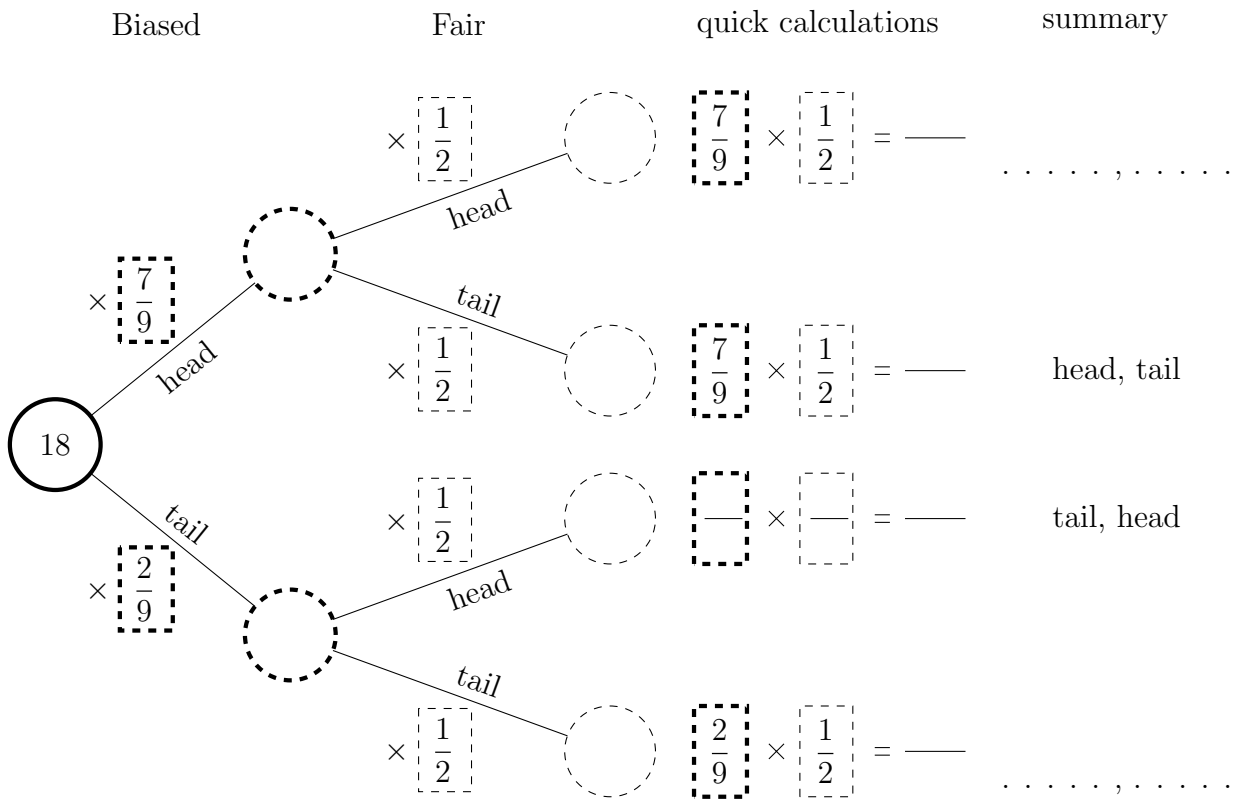
.....

Turn over for more questions and answers

3. Lara will throw a biased coin and a fair coin.

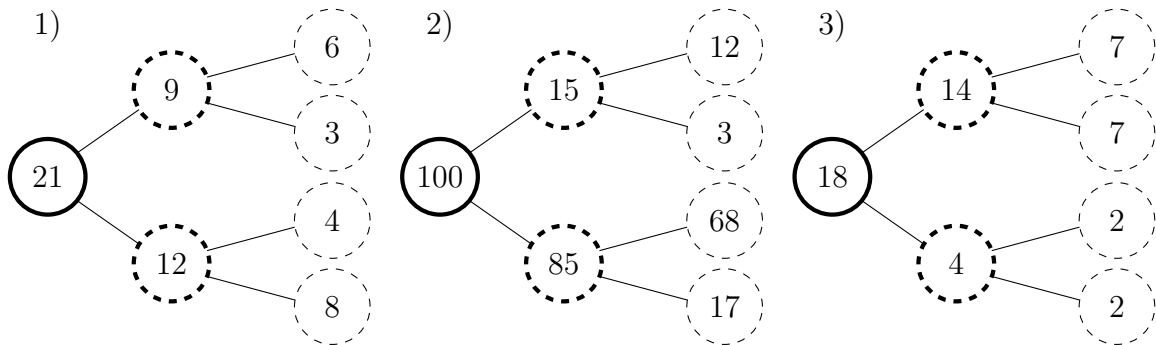
The probability of getting a head with the biased coin is  $\frac{7}{9}$

(a) Complete the tree, quick calculations and outcome summary.



(b) Work out the probability of Lara getting tails on both coins. ....

Answers



1) quick calc	summary	2) quick calc	summary	quick calc	summary
$= \frac{6}{21}$		$= \frac{12}{100}$		$= \frac{7}{18}$	head, head
$= \frac{3}{21}$	black, other	$= \frac{3}{100}$		$= \frac{2}{18}$	
$\frac{4}{7} \times \frac{1}{3} = \frac{4}{21}$		$= \frac{68}{100}$	fail, pass	$\frac{2}{9} \times \frac{1}{2} = \frac{2}{18}$	
$= \frac{8}{21}$	other, other	$\frac{17}{20} \times \frac{1}{5} = \frac{17}{100}$	fail, fail	$= \frac{2}{18}$	tail, tail

1b)  $\frac{3}{21}$  or  $\frac{1}{7}$

2b)  $\frac{17}{100}$

3b)  $\frac{2}{18}$  or  $\frac{1}{9}$