

# Probability Trees

November 2024 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
20 (a)	(0.3) 0.7 0.3 0.7 0.3 0.7	B2	all probabilities correctly placed	Accept equivalent fractions or percentages for probabilities
(b)	0.49	M1	for 0.7 correctly placed for Game 1)	ft their diagram provided probabilities are less than 1
		M1	for a correct method, ft their tree diagram eg $0.7 \times 0.7$ only	ft their diagram provided probabilities are less than 1
		A1	oe, ft their tree diagram	An answer of $\frac{0.49}{1}$ scores M1A0 unless 0.49 seen

## June 2022 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
20 (a)	0.87, 0.94, 0.94	B2  (B1	for all probabilities correct  for 0.87 or 0.94 correctly placed)	Accept any equivalent fraction, eg $\frac{87}{100}$ , $\frac{47}{50}$ or equivalent percentage form 87%, 94%
(b)	0.0078	M1  A1	for $0.13 \times 0.06$ oe  0.0078 oe	Accept any equivalent fraction, eg $\frac{39}{5000}$ or equivalent percentage form 0.78% or $7.8 \times 10^{-3}$

November 2022 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
26 (a)	0.7	B1	for 0.7 on the first branch	Accept equivalent fractions or percentages for probabilities
	0.65, 0.65	B1	for 0.65, 0.65 on the second branches	
(b)	0.105	M1	for $0.3 \times 0.35$	
		A1	oe	

## June 2024 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
27 (a)	0.4	B1	for 0.4 in correct position	Accept equivalent fractions or percentages for probabilities
	0.45, 0.55, 0.45	B1	for the correct probabilities for coin <b>B</b> in the correct place on the branches	
(b)	0.33	M1	for a correct method, eg $0.6 \times 0.55$ only	
		A1	for 0.33 oe	

June 2020 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
27 (a)	$\frac{1}{3}, \frac{2}{3} \quad \frac{1}{3}, \frac{2}{3}, \frac{1}{3}, \frac{2}{3}$	B2	six fully correct probabilities	Accept any equivalent fraction, decimal form 0.33(3...) and 0.66(6...) or 0.67 or percentage form 33(.3...)%, and 66(.6...)%, or 67%
(b)	$\frac{2}{9}$	(B1)	at least 2 correct probabilities)	
		M1	for $\frac{1}{3} \times \frac{2}{3}$ oe or ft probabilities from diagram	Accept any equivalent fraction, decimal form 0.22(2...) or percentage form 22(.2...)%
		A1	for $\frac{2}{9}$ oe	

## June 2023 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
31	0.06	M1 A1	for $0.2 \times 0.3$ oe 0.06 oe	Accept any equivalent fraction or 6%