

1	(a)	Frequency diagram See end of m/s	C3 (C2 (C1	for a fully correct frequency diagram for at least 5 correct values in the frequency diagram) for at least 3 correct values in the frequency diagram)	If probabilities used instead of frequencies then maximum of C2 can be awarded Accept equivalent decimal or percentage forms of probability Ignore errors in cancelling of their $\frac{12}{72}$
	(b)	$\frac{12}{72}$	M1 A1	for $\frac{a}{72}$ where $0 < a < 72$ and a is an integer or $\frac{12}{b}$ where $b > 12$ and b is an integer or 12 : 72 or ft their values for 72 and/or 12 from (a) for $\frac{12}{72}$ oe or ft (a)	

2	(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% Accept any equivalent fraction, eg $\frac{39}{5000}$ or equivalent percentage form 0.78% or 7.8×10^{-3}
	(b)	0.0078	M1 A1	for 0.13×0.06 oe 0.0078 oe	

3	(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 A1	for 0.3×0.35 oe	

4		0.06	M1 A1	for 0.2×0.3 oe 0.06 oe	Accept any equivalent fraction or 6%

5	(a)	45 150 105 90 65 25	B3 (B2 (B1	for a fully correct frequency tree for at least 4 figures correctly placed) for at least 1 figure correctly placed)	If probabilities used instead of frequencies award a maximum of B2 Must be values from their diagram with numerator < denominator
	(b)	30	M1 A1	for eg $\frac{45}{150}$ oe or $45 \div 150 (= 0.3)$ or for $\frac{[\text{number of car owners who own a bicycle}]}{[\text{total number of people who own a car}]}$ ft diagram oe for 30 or ft diagram	