

	b	$\frac{2}{5}$ nfwv	4	B3 for $\frac{8}{20}$ oe nfwv or B2 for identifying 2,3,5,7,11,13,17,19 as being prime (and no non-primes identified) or B1 for identifying 2,3,5,7,11,13,17,19 identified as being prime with no more than 2 errors and M1 for $\frac{\text{their number of primes}}{20}$	e.g. 1, 2, 3, 5, 7, 11, 13, 17, 19 1, 2, 5, 7, 11, 13, 17, 19 (errors; 1 included, 3 omitted) 3, 5, 7, 11, 13, 17, 19 (omission of 2) <i>Their</i> number of primes must be less than 20
--	----------	--------------------	----------	--	---

7		0.38 oe	2	M1 for $1 - (0.4 + 0.05 + 0.17)$	If answer line blank check table $\frac{0.38}{1}$ scores M1
----------	--	---------	----------	---	---

6	(a)	(i) certain	1		
		(ii) evens	1		

1	a	B	1		
	b	E	1		
	c	D	1		

9	(a)	(i) ACB, BAC, BCA, CAB, CBA	2 2 A01.3a	B1 for at least three more ways of seating listed	
		(ii) $\frac{2}{3}$ oe	1 1 A02.1b	FT on answer to part (a)(i)	
		(iii) $\frac{1}{6}$ oe	1 1 A02.1b	FT on answer to part (a)(i)	
	(b)	2 nights	4 1 A01.3b 2 A03.1d 1 A03.3	M1 for $\frac{500}{50} = 10$ M1 for £40 M1 for <i>their</i> '12.5' – 10 and rounding down	12.5 can be implied from $\frac{500}{\text{their '40'}}$

8	(a)		Too many branches oe	1		Accept e.g. Takes too long oe Tree would be too big oe Too complicated oe Too hard to draw oe Tree diagrams are better for fewer outcomes oe Do not accept e.g. Trees can only have two branches
---	-----	--	-----------------------------	---	--	--

9

J560/05

Mark Scheme

June 2018

Question	Answer	Marks	Part marks and guidance
(b) (i)	Attempts sample space 36 correct outcomes	M1 A1	Presented in any clear form, including list or table Pairs shown or accept as totals in table For M1, accept two by two table drawn with row and column labelled 1 to 6 [with no entries or with incorrect entries] For M1 accept as a list of at least 6 different pairs or totals with no others or no repeats If listing as pairs on table, condone e.g. (2, 1) listed as (1, 2) etc Accept indicated on sample space
(ii)	$\frac{2}{36} = \frac{1}{18}$	2	M1 for (5, 6) and (6, 5) identified or for $2\left(\frac{1}{6} \times \frac{1}{6}\right)$ oe

8	(a)		52	1	
---	-----	--	----	---	--

6

J560/01

Mark Scheme

November 2017

Question	Answer	Marks	Part marks and guidance
(b)	60 8 12 3	4	B1 for each correct value OR B1 for 60 B1 FT for 12 B1 FT for 8 and 3 Answers must be integers
(c)	Practical test because $61 > 60$ (Comparison explicitly seen)	3	B1 for 61 or $52+9$ or $84.7[2\dots]\%$ or 85% [for practical] B1FT for <i>their</i> 60 or <i>their</i> $83[.3\dots]\%$ [for theory] B1FT for correct conclusion based on <i>their</i> figures in the table, must see comparison Mark to candidate's advantage Accept denominator of 72 FT from their diagram, must give numerical values

6		[Year 10] [left] 17 and [total] 61 [Year 11] [left] 20 and [total] 59 and a comparison such as there are more Year 11 left-handers [than Y10] and there are fewer Year 11s [than Y10] in total or two comparable figures e.g. $[\frac{17}{61} =] .28$ or .279 or .27[8...] or 28% or $\frac{1008}{3599}$ oe $[\frac{20}{59} =] .34$ or .339 or .33[8...] or 34% or $\frac{1220}{3599}$ oe and conclusion e.g. Y11	6	B5 for [Year 10] 17 with 61, and [Year 11] 20 with 59 (eg as fractions, or "out of") and B1 for a comparison and conclusion e.g. two comparable figures or a statement such as "there are more Year 11 left-handers [than Y10] and there are fewer Year 11s [than Y10] in total" or the following marks may be seen in their working or in the table B4 for [Year 10] 17 with 61 and [Year 11] 20 with 59 or B3 for [Year 10] 17 with 61 or [Year 11] 20 with 59 or B2 for 17 or both 37 and 59 or B1 for 37 or 59 if percentages used we must see % sign or use "out of 100 people ..."
---	--	---	---	--

5	(a)	0.14, 0.09, (0.19), 0.2[0], 0.13, 0.25	2	B1 for three or four correct relative frequencies in the correct place	Accept fractions
	(b)	(i) [Unbiased dice] would have each [rf=] 0.16-0.17 or [Unbiased dice] would have each [f=] 50 or comment about very unequal [relative] frequencies and implied comparison	1		Accept "about 0.16" Accept "about 50" Not enough to say one number was rolled the most. Must say 6 [and 4] or some numbers are much higher or 2 or 5 or some numbers are much lower
	(ii)	need larger sample oe	1		

7	(a)	9	2	M1 for 15×0.62, possibly soi by 9.3 If 0 scored, then SC1 for 15×0.41 leading to 6 as final answer	Condone "9 or 10" as final answer for 2 marks if correct working is shown.
---	-----	---	---	--	---