Mark Scheme

Q1.

Question	Working	Answer	Mark	Notes
		No (supported)	P1 C1	Process to find number of rose trees e.g. 215 ÷17 (=12.647...) or show number of choices with 12 and 13 eg 17 × 12 = 204 and 17 × 13 = 221 No with interpretation that 12.6.. is not a whole number or a whole number of plants must be bought or number of plants would have to be between 12 and 13 which is not possible

(**Q11 1MA1/3H, June 2017**)

Q2.

Question	Working	Answer	Mark	Notes
(a)		No with reason	C1	for "no" with reason, eg Tracey should multiply 8 and 7
(b)		66	M1	for starting a method to find number of games played, eg 12 × 11 (= 132) or sum of integers from 1 to 11
			A1	cao

(**Q15 1MA1/2H, Nov 2017**)

Q3.

Question	Answer	Mark	Mark scheme	Additional guidance
	(MYL) (MLY) (YML) (YLM) (LMY) (LYM)	M1	for at least 3 correct different combinations	for M1 ignore extras or repeats; accept words or unambiguous abbreviations
		A1	fully correct list with no extras or repeats	

(**Q07 1MA1/2F, June 2018**)

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Q4.

Question	Answer	Mark	Mark scheme	Additional guidance
	1335	M1	for one correct procedure eg 9 × 15 (=135) **or** 15 × 8 (=120) **or** 9 × 15 × 8 (=1080)	Ignore additional products.
		M1	for all three correct products eg "135", "120", "1080" **or** 9 × 15, 15 × 8, 9 × 15 × 8 oe	Only these three products must be identified. There is no need to indicate summing at this stage.
		C1	for showing the three correct products added eg 135 + 120 + 1080	There is no need to show the three products sum to 1335

(**Q11 1MA1/2H, Nov 2018**)

Q5.

Question	Answer	Mark	Mark scheme	Additional guidance
(a)	125	M1	for method to find the number of 3 digit combinations, eg 5^3 **or** $5^3 - 1$	
		A1	for 125 **or** 124	
(b)	60	M1	for method to find the number of combinations with 3 different digits eg 5 × 4 × 3 **or** finds there are 65 combinations that do not have 3 different digits	
		A1	cao	

(**Q16 1MA1/1H, June 2019**)

Q6.

Question	Answer	Mark	Mark scheme	Additional guidance
	7	M1	method to find number of combinations, eg 19 × 25 oe (= 475) **or** for 3325 ÷ 19 (= 175) **or** 3325 ÷ 25 (= 133)	
		A1	cao	

(**Q14 1MA1/2H, Nov 2019**)

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Q7.

Question	Answer	Mark	Mark scheme	Additional guidance
	Yes (supported)	P1	for process to find number of combinations, eg 5 × 8 oe (= 40) **or** for 240 ÷ 5 (= 48) **or** 240 ÷ 8 (= 30) **or** for 240 ÷ 5 ÷ 8 (= 6) **or** 5 × 8 × x = 240	
		C1	Yes **and** 6	

(**Q11 1MA1/2H, Nov 2020**)

Q8.

Question	Answer	Mark	Mark scheme	Additional guidance
	240	M1	for 16 × 5 × 3	
		A1	cao	

(**Q11 1MA1/3H, June 2022**)

Q9.

Question	Answer	Mark	Mark scheme	Additional guidance
	7	P1	for process to use product rule to find number of desserts, eg 5 × 12 × desserts = 420 or 420 ÷ (5 × 12) oe	
		A1	cao	

(**Q19 1MA1/1H, June 2023**)

Q10.

Question	Answer	Mark	Mark scheme	Additional guidance
	WP WS WC BP BS BC GP GS GC	B2	for all correct and no incorrect or repeats	Ignore repeats
		(B1	for at least 4 correct)	

(**Q09 1MA1/2F, Nov 2023**)

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Q11.

Question	Answer	Mark	Mark scheme	Additional guidance
	HHH, HHT, HTH, HTT, THH, THT, TTH, TTT	M1 A1	for at least 3 correct outcomes from HHH, HHT, HTH, HTT, THH, THT, TTH, TTT ignoring extras and repeats for all 8 outcomes with no extras or repeats	May be written in words

(**Q10 1MA1/2F, June 2024**)

Q12.

Question	Answer	Mark	Mark scheme	Additional guidance
	435	M1 A1	for start to method of finding the number of pairs, eg 30×29 (= 870) oe or $\frac{30 \times 29}{2}$ or clear intention to sum the integers from 1 to 29 eg $29 + 28 + \ldots + 2 + 1$ cao	M1 for $\frac{1}{30} \times \frac{1}{29}$

(**Q13 1MA1/3H, June 2024**)

Q13.

Question	Answer	Mark	Mark scheme	Additional guidance
	180	M1 A1	for $10 \times 9 \times 4$ (= 360) **or** $10 \times 9 \times 4 \div 2$ **or** $10 \times 9 \div 2$ (= 45) **or** $(9 \times 4) + (8 \times 4) + (7 \times 4) + (6 \times 4) + (5 \times 4) + (4 \times 4) + (3 \times 4) + (2 \times 4) + (1 \times 4)$ oe cao	

(**Q14 1MA1/2H, Nov 2024**)

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Q14.

Question	Answer	Mark	Mark scheme	Additional guidance
	$\frac{1}{120}$	P1	for correctly identifying at least two of the number of options, eg 2 options for 1st digit, 4 options for 2nd digit	May be seen as part of a calculation Position of digit / Number of options: 1st 2; 2nd 4; 3rd 3; 4th 5
		P1	for process to multiply the four numbers of options with at least three correct, eg $2 \times 4 \times 3 \times 5$ (= 120) **or** for process to multiply 4 fractions with at least 3 correct $\frac{1}{2} \times \frac{1}{4} \times \frac{1}{3} \times \frac{1}{5}$ oe	
		A1	for $\frac{1}{120}$ oe	

(**Q16 1MA1/3H, Nov 2023**)

Q15.

Question	Answer	Mark	Mark scheme	Additional guidance
	240	M1	for start to method to find total number of matches, eg 16×15 or $16^2 - 16$ or $16 \times 15 \times 2$ (= 480) or $\frac{16 \times 15}{2}$ (= 120)	Credit complete listing strategies
		A1	cao	

(**Q14 1MA1/3H, June 2018**)

Q16.

Question	Answer	Mark	Mark scheme	Additional guidance
	Shown	M1	for one correct product eg 7×5 (= 35) or 13×5 (= 65) or $7 \times 13 \times 5$ (= 455)	Ignore additional products
		C1	for showing three correct products added eg $35 + 65 + 455$	There is no need to show the three products sum to 555

(**Q15 1MA1/3H, Nov 2022**)

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Q17.

Question	Working	Answer	Mark	Notes
		SP, SR, SB, FP, FR, FB MP, MR, MB	B2 (B1)	all 9 combinations given with no extras or repeats at least 6 correct combinations given, condone repeats and incorrect combinations

(**Q07 1MA1/3F, June 2017**)

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