

Mean, Median, Mode and Range Past Paper Questions (MS)



Q1.

Question	Working	Answer	Mark	Notes
(a)	3 4 4 5 5 6 8 9 10	5	2	M1 for ordering the 9 numbers A1 cao
(b)	$(4 + 8 + 5 + 9 + 10 + 5 + 6 + 3 + 4) \div 9$ $54 \div 9$	6	2	M1 for $(4 + 8 + 5 + 9 + 10 + 5 + 6 + 3 + 4) \div 9$ or $54 \div 9$ A1 cao

Q2.

PAPER: IMA0_2F				
Question	Working	Answer	Mark	Notes
		13	2	M1 for ordering the 9 numbers or for indicating the middle number A1 cao

Q3.

Paper 1MA1: 2F				
Question	Working	Answer	Mark	Notes
		13	M1 A1	Puts numbers in order or clear attempt to find 5th number or $(9 + 1) / 2$ or selects 11

Q4.

Question	Working	Answer	Mark	Notes
(a)		19	1	B1 cao
(b)		21.5	2	M1 for evidence of adding all 10 numbers and dividing by 10 eg $(20+14+21+19+27+31+19+19+24+21) \div 10$ or $215 \div 10$ or $x \div 10$ seen where $205 \leq x \leq 225$ A1 cao
(c)		96	3	M1 for $320 \times 2.4 (= 768)$ or for $1000 \div 2.4 (= 416.6$ or $416)$ M1 for $(1000 - 320 \times 2.4) \div 2.4$ or for $1000 \div 2.4 - 320$ or an answer of $96.6(66\dots)$ or 96.7 or 97 A1 cao



Q5.

PAPER: 1MA0_2F				
Question	Working	Answer	Mark	Notes
(a)		2	1	B1 cao
(b)		4	2	M1 for showing a clear intention to add all ten numbers and to divide by 10 A1 cao
(c)		55	2	M1 for evidence of at least 4 attempts to multiply number of birds by frequency eg. 0×3 , 2×1 , 3×2 , 4×3 , 5×4 , 3×5 A1 cao

Q6.

PAPER: 1MA0_2F				
Question	Working	Answer	Mark	Notes
(a)		1	1	B1 cao
(b)		1.8	2	M1 for adding all 10 scores and dividing by 10 eg $18 \div 10$ A1 cao
* (c)		Greater and explanation	2	M1 (ft from (b)) adding all 12 scores and dividing by 12 or for comparing 4 and 2 with '1.8' or comparing $4 + 2$ with $2 \times '1.8'$ C1 (ft from (b)) for correct conclusion and correct explanation NB: if M1 A1 awarded in (b) comparison must be with 1.8

Q7.

PAPER: 1MA0/2F				
Question	Working	Answer	Mark	Notes
(a)		9.6	2	M1 for complete method to calculate the mean eg $(12+6+7+10+13) \div 5$ A1 for 9.6 oe
(b)		5	2	M1 for $\frac{12}{240} \times 100$ oe A1 cao



Q8.

Question	Working	Answer	Mark	Notes
(a)		3	B1	cao
(b)		9	M1 A1	for selecting 1 and 10 cao
(c)		$\frac{15}{59}$	M1 M1 A1	for finding the number of words 6 or longer, e.g. $3 + 4 + 5 + 2 + 1$ for a method to find the total number of words, e.g. $5 + 8 + 12 + 10 + 9 + 3 + 4 + 5 + 2 + 1$ cao

Q9.

Question	Working	Answer	Mark	Notes
(a)		6	1	B1 cao
(b)		5.5	2	M1 for listing the numbers in order or an answer of 4 A1 for 5.5
(c)		7	2	M1 for $9 - 2$ or $2 - 9$ or 2 to 9 A1 cao

Q10.

Question	Working	Answer	Mark	Notes
(a)		13	1	B1 cao
(b)		12	2	M1 for ordering at least 16 of the original values and identifying the middle of the ordered list or indicating at least one of the middle two numbers for $n = 16$ or 18 and the middle number for $n = 17$ A1 cao



Q11.

Question	Answer	Mark	Mark scheme	Additional guidance
	No (supported)	P1	for process to find total weight of the 4 red bricks, eg. $5 \times 4 (= 20)$ or for process to find total weight of the 5 blue bricks, eg. $9 \times 5 (= 45)$	May be seen next to statements 20 must be clearly referenced to the red bricks. $5 + 9 + 6 = 20$ scores no marks
		P1	for process to find total weight of all 10 bricks, eg. " 20 " + " 45 " + $6 (= 71)$	
		C1	No with correct supporting evidence Acceptable examples No, it is 7.1 She is wrong, it is 0.1 more No, (the total weight is) 71 not 70 Not acceptable examples Yes No, it is 71	Candidates working in grams will need to give 7100 and 7000 for example as comparable figures.

Q12.

Question	Answer	Mark	Mark scheme	Additional guidance
	4	P1	for start to process, eg $65 + 100 + 3 \times 5 + 1 \times 20 (= 200)$ or $3 \times 80 (= 240)$	May be part of an algebraic statement eg $65 + 100 + 35 + 10x$
		P1	for $65 + 100 + 3 \times 5 + 1 \times 20 (= 200)$ and $3 \times 80 (= 240)$ or " 240 " - $100 - 65 (= 75)$	
		P1	for process to find value of £10 notes in Carl's wallet, eg " 240 " - " 200 " ($= 40$) or for " 75 " - $3 \times 5 - 1 \times 20 (= 40)$	
		A1	cao	NB $80 - 35 (= 45)$ leading to 4 gets 0 marks

Q13.

	Working	Answer	Mark	Notes
		7	3	M1 for 4×10 or 40 or $12 + 6 + 15 + x/4$ or a correct equation M1 for a complete correct method A1 cao



Q14.

	Working	Answer	Mark	Notes
		7	3	M1 for $4 \times 6 (= 24)$ or $4 + 6 + 7 (= 17)$ M1 (dep) for "24" – "17" A1 cao

Q15.

PAPER: 1MA0_1F				
Question	Working	Answer	Mark	Notes
(a)		2	1	B1 cao
(b)		0,1,2	2	M1 for any two of 0, 1, 2 correct with no extras or for showing 3,4,6,7 as consecutive numbers in an ordered list (ignore numbers before or after 3,4,6,7 and allow an extra 4 written within the list 3,4,4,6,7). A1 fully correct answer in any order

Q16.

PAPER: 5MB1F_01				
Question	Working	Answer	Mark	Notes
		Correct pairs 3,7 or 4,6 or 2,8 or 5,5	2	B2 for 2 pairs from 5,5 or 3,7 or 4,6 or 2,8 (B1 for one pair) (Note: Condone non- integers if correct pair(s) given)