

Q1. (2017)

(A)

8(a)	2nd	B1	
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(B)

8(b)	$(4 + 2 + 4 + 8 + 8 + 7 + 9 + 5) \div 10$ or $(6 + 12 + 15 + 14) \div 10$ or $(25 + 22) \div 10$ or $2.5 + 2.2$ or $4.7 \div 10$	M1	Condone the omission of brackets Accept one error or omission in reading from diagram
	4.7	A1	oe
	Additional Guidance		
	5 on answer line with 4.7 in working		M1A1
	4 on answer line with 4.7 in working		M1A0
	$(4 + 2 + 4 + 8 + 8 + 7 + 9) \div 10$ is one omission $(4 + 2 + 4 + 8 + 8 + 7 + 9 + 6) \div 10$ is one error $(6 + 12 + 15 + 13) \div 10$ assume one error $(25 + 23) \div 10$ assume one error $2.5 + 2.3$ assume one error		M1
	Do not accept further calculation after 4.7 seen $4.7 \div 10 = 4.7$ $4.7 \times 4 = 18.8$		M1A0
	Use of away goals only, treat as misread from the words in part (a) $(2 + 8 + 7 + 5) \div 10$ or 2.2 condone the omission of brackets		M1A0
	5 on answer line without working		M0A0
	$(6 + 12 + 15) \div 10$ assume two omissions		M0A0

(C)

8(c)	Alternative method 1		
	$4 + 4 + 8 + 9$ and $2 + 8 + 7 + 5$ or 25 and 22	M1	Accept one error in reading from diagram
	3	A1	
	Alternative method 2		
	$4 - 2$ or 2 and $4 - 8$ or -4 and $8 - 7$ or 1 and $9 - 5$ or 4	M1	Accept one error in reading from diagram Differences may be seen on the diagram
	3	A1	
	Additional Guidance		
	$25 - 22 = 3$		M1A1
	$4 - 2 = 2$ and $4 - 8 = -4$ and $8 - 6 = 2$ and $9 - 5 = 4$ is one reading error		M1
	$4 - 2 = 2$ and $4 - 8 = 4$ and $8 - 7 = 1$ and $9 - 5 = 4$		M1
	$4 + 4 + 8 + 9$ and $2 + 7 + 7 + 5$ is one reading error $24 - 21 = 3$		M1 A0
	1^{st} 2 2^{nd} 4 3^{rd} 1 4^{th} 4 is one error in calculation without working		M0A0
	1^{st} 2 3^{rd} 1 4^{th} 4 is one omission		M0A0
	$24 - 21 = 3$ with no other working		M0A0
	$4 + 4 + 8 + 8$ and $2 + 8 + 6 + 5$ is two reading errors $24 - 21 = 3$		M0 A0

(D)

8(d)	No and valid reason eg Indicates that one or more home teams might have won a game or games by a lot of goals	B1	
	Additional Guidance		
	In numerical examples relating to results, the total home goals must be more than the total away goals and there cannot be more home wins than away wins eg No, the scores could have been 2-0 6-0 0-3 0-2 2-2 3-3 3-3 4-4 4-4 1-1 No, the scores could have been 2-0 6-0 0-3 0-2 and then all draws		B1 B1
	If scores are given, assume home team first		
	Use of 'they' implies the home team in a statement relating to a team eg No, because they could score more just in one game		B1
	No, the home team scored 0 in 9 matches and 25 in the final game		B1
	No, the home team may have scored lots in one game		B1
	No, multiple goals could be scored by a home team in one game		B1
	No, the away team win a lot of games by one goal and lose by a lot of goals in one game		B1
	Yes with or without an explanation		B0
	No, the away team win a lot of games by one goal		B0
	No, multiple goals could be scored in one game		B0
	No, more goals scored at home but it doesn't mean that they won more		B0
	No, we don't know how many goals were scored in each game		B0
	No, the home team scored more goals in some games than others		B0

Q2. (2019)

27	$(200 + 160 + 104 + 100) \div 4$ or $564 \div 4$ or 141	M1	
	their $141 \div 3 \times 8$ or 47×8 or $1128 \div 3$ or 376	M1dep	oe accept $141 \times 2.66(\dots)$ or 141×2.67
	their 376×5 or 1880	M1dep	
	427	A1	
	Additional Guidance		
	$(270 + 400 + 483 + 300 + 427) \div 5$ embedded answer		M1M1M1A0
	$(1453 + x) \div 5 = 376$ and $1453 + x = 1880$		M1M1M1
	$(1453 + x) \div 5 = 376$		M1M1M0
	$200 + 160 + 104 + 100 \div 4$ scores M0 unless recovered		

Q3. (2020)

(A)

Q	Answer	Mark	Comments
17(a)	1×5 and 2×6 and 3×8 and 4×2 and 5×4 or 5 and 12 and 24 and 8 and 20 or 69	M1	allow one error
	$(5 + 12 + 24 + 8 + 20) \div 25$ or $69 \div 25$ or their $69 \div 25$	M1dep	without working their 69 must be the correct sum of their products
	2.76	A1	oe
	Additional Guidance		
	Five products or values must be seen for first M1		
	Ignore attempt to round after 2.76 seen		M1M1A1
	$69 \div 5$		M1M0
	$5 + 12 + 24 + 8 + 20 \div 25$ unless recovered		M1M0
	Correct products seen with $25 \div 5$ or $25 \div 15$ or $15 \div 5$		M0

(B)

Q	Answer	Mark	Comments
17(b)	$5 + 6 + 8$ or $25 - (4 + 2)$ or 19 or $1 - \frac{4+2}{25}$	M1	oe
	$\frac{19}{25}$ or 0.76 or 76%	A1	oe
	Additional Guidance		
	Ignore attempts to simplify or convert a correct fraction		
	Ignore probability words		
	19 out of 25 or 19 in 25 alone on the answer line with a correct answer in working		M1A1
	19 out of 25 or 19 in 25 together with a correct answer on the answer line		M1A1
	19 : 25 with a correct answer together on the answer line		M1A0

Q4. (2021)

Q	Answer	Mark	Comments
28	$6 \times 10 - (12 + 7 + 15 + 3)$ or $60 - 37$ or 23	M1	implied by two numbers with a total of 23 eg -11 and 34
	Two positive numbers with a total of 23	A1	
	Two positive numbers which make the range of the list 19	B1	eg a and 22, where $3 \leq a \leq 22$
	Additional Guidance		
	2 and 21 is the only fully correct answer		M1A1B1
	11.5 and 11.5		M1A1B0
	1 and 22		M1A1B0
	0 and 23		M1A0B0

Q5. (2022)

Q	Answer	Mark	Comments
14(b)	1×7 and 2×5 and 3×4 and 4×1 and 5×3 or 7 and 10 and 12 and 4 and 15 or 48	M1	oe allow one error or omission
	$(7 + 10 + 12 + 4 + 15) \div 20$ or $48 \div 20$ or their $48 \div 20$	M1dep	oe eg $\frac{48}{20}$ or $\frac{12}{5}$ or $2\frac{2}{5}$ without working their 48 must be the correct sum of their products
	2.4	A1	SC1 33.75
	Additional Guidance		
	$48 \div 5$		M1M0
	$1 \times 7 + 2 \times 5 + 3 \times 4 + 4 \times 1 + 5 \times 5$ (5 $\times$ 5 is one error) $58 \div 20 = 2.9$		M1 M1A0
	$8 + 10 + 12 + 4 + 15$ (8 is one error) $49 \div 20 = 2.45$		M1 M1A0
	Answer 2 after 2.4 seen		M1M1A0
	$7 + 10 + 12 + 4 + 15 \div 20$ not recovered		M1M0
	Correct products or values seen but a different method used is a choice of methods eg 7 10 12 4 15 followed by $20 \div 5$ or $20 \div 15$		M0

Q6. (2023)

(A)

Q	Answer	Mark	Comments
2(a)	4	B1	

(B)

Q	Answer	Mark	Comments
2(b)	2 4 4 8 10 11 12 15 or 2 4 4 8 10 or 15 12 11 10 8 or 8 and 10 or $18 \div 2$ or $\frac{8+1}{2}$ th or 4.5th value	M1	full list of numbers in either order allow one missing, extra or transcription error in an otherwise full list of numbers list of first or last five numbers in either order allow only a transcription error in a list of the first or last five numbers oe works out the position of the median in the list
	9	A1	
	Additional Guidance		
	Ordered list in the stem of the question can be assumed to be for part (b) unless contradicted by the working seen in the working space		
	Numbers in a list may be seen crossed out in an attempt to find the median		
	Answer 9 from any or no list		M1A1
	Puts list in order then finds the mean		M1A0
	States 4.5th and gives 11.5 (oe)		M1A0

(C)

Q	Answer	Mark	Comments
2(c)	13	B1	

Q7. (2024)

Q	Answer	Mark	Comments
25	$(8 + 9 + 9 + 6 + 9 + 10) \div 6$ or $51 \div 6$ or 8.5	M1	oe implied by 34
	$162 \div 360 \times 100$ or 45	M1	oe
	$4 \times \text{their } 8.5 + \text{their } 45$ or $34 + 45$	M1dep	oe dep on M2
	79	A1	SC2 53.5 or 57.5
	Additional Guidance		
	Check table and pie chart for working		
	$34 + 45\%$		M1M1M1