

Q1. (2017)

5(a)	26.47640(....)	B1	
	Additional Guidance		

Q2. (2017)

	Balance (£)		B2	Must be in correct boxes B1 (£)84.09 or (£)940.30 or (£)84.09p and (£)940.30p or B1ft for their 84.09 + 856.21																		
	212.48																					
	(£)84.09																					
	(£)940.30																					
	Additional Guidance																					
9	<table><tr><th>Date</th><th>Description</th><th>Credit (£)</th><th>Debit (£)</th><th>Balance (£)</th></tr><tr><td>13/12/2016</td><td>Starting balance</td><td></td><td></td><td>212.48</td></tr><tr><td>14/12/2016</td><td>Council tax</td><td></td><td>128.39</td><td>84.09</td></tr><tr><td>15/12/2016</td><td>Salary</td><td>856.21</td><td></td><td>940.30</td></tr></table>	Date	Description	Credit (£)	Debit (£)	Balance (£)	13/12/2016	Starting balance			212.48	14/12/2016	Council tax		128.39	84.09	15/12/2016	Salary	856.21		940.30	B2
	Date	Description	Credit (£)	Debit (£)	Balance (£)																	
	13/12/2016	Starting balance			212.48																	
	14/12/2016	Council tax		128.39	84.09																	
	15/12/2016	Salary	856.21		940.30																	
	340.87 and 1197.08				B1ft																	
	340.87 and 1197.08p				B0ft																	
	84.09 and 940.3				B1																	
	Ignore any working in grey boxes																					
	84.09p and 940.30p				B1																	
	£84.09p and £940.30p				B1																	
	84.09p and 940.3(p)				B0																	

Q3. (2017)

22	8 ² and 3 ² seen or 8 × 8 and 3 × 3 seen or 64 and 9 seen or 55	M1	M2 for $\sin^{-1}\left(\frac{3}{8}\right) = 22.(\dots)$ and 8 cos (their 22.(...)) or
	$\sqrt{8^2 - 3^2}$ or $\sqrt{64 - 9}$ or $\sqrt{55}$	M1dep	$\cos^{-1}\left(\frac{3}{8}\right) = 67.(\dots)$ or 68 and 8 sin (their 67.(...))
	[7.4, 7.42]	A1	
	Additional Guidance		
	$\sqrt{8^2 + 3^2}$ or $\sqrt{64 + 9}$ or 8 ² + 3 ² or 64 + 9		M1M0depA0
	Only $\sqrt{73}$ or only 73 or only 8.5...		M0
	If trigonometry used it must be a fully correct method that would lead to the correct value of x		
	Partial method using trigonometry		M0
	Ignore units given		
	8 cm ² is not 8 ² unless recovered		
	Correct answer in range seen, ignore further work if truncates or rounds		M2A1
	8 ² = 16 and 3 ² = 6, $\sqrt{16 - 6}$		M1M1depA0
	Scale drawing with answer in range [7.4, 7.42]		M2A1
	Scale drawing with answer not in range [7.4, 7.42]		M0

Q4. (2019)

10	$90 \times \frac{3}{10}$ or 27	M1	oe
	their 27 × 2	M1dep	oe 27 × 2 implies M2
	54	A1	SC1 answer 126 or answer 600
	Additional Guidance		
	Answer 54		M1M1A1
	$\frac{3}{10}$ of 90 is insufficient method unless a correct method or 27 is seen or implied		

Q5. (2019)

(A)

17(a)	$n + 5$ or $5 + n$	B1	oe eg $N - 2 + 7$
	Additional Guidance		
	Letters other than n or N eg $x + 5$		B0

(B)

17(b)	$n + n - 2$ + their $(n + 5)$ or $3n + 3$	M1	condone any letter ft their algebraic expression in (a)
	$3n + 3 = 60$ or $(n =) 19$ or $(n - 2 =) 17$	M1dep	ft their algebraic expression in (a) correct ft equation with terms on LHS collected 19 10p coins or 17 20p coins or 19, 17, 24 chosen implies M2
	(their $19 - 2) \times 0.2$ or their 17×0.2 or 3.4 or (their $19 - 2) \times 20$ or their 17×20 or 340	M1dep	ft their algebraic expression in (a) 3.4 or 340 implies M3
	3.40	A1	condone 3.40p SC2 answer 17
	Additional Guidance		
	Allow a restart in this part ie answer £3.40 scores full marks		
	Working may be seen by the table		
	Answer 340p		M1M1M1A0
	£3.40 with answer eg £17.30 (total of all coins)		M1M1M1A0
	Only follow through their algebraic expression from (a) if an expression and / or equation for the total number of coins is used in this part		
	Award the M mark(s) for a correct ft expression or equation even if not subsequently used		
	The solution to an equation derived from an incorrect expression in (a) can score the first three marks eg answer in (a) $n - 5$ then working in (b) $n + n - 2 + n - 5 = 60$ $n = [22, 23]$ ([22, 23] $- 2) \times 0.2 = [4, 4.20]$		M1M1 M1A0

Q6. (2021)

Q	Answer	Mark	Comments
7	$10.74 \div 6 \times 11$ or 1.79 seen	M1	oe eg $2 \times 10.74 - 10.74 \div 6$
	19.69	A1	
	Additional Guidance		
	$6 \div 10.74 = 1.79$ (recovered)		M1
	$6 \div 10.74$		M0

Q7. (2021)

Q	Answer	Mark	Comments
11	£20 notes 13 £10 notes 2 £5 notes 3	B3	B2 three or four shops correct (A) $3 \times £20, 1 \times £5$ (B) $2 \times £20$ (C) $5 \times £20, 1 \times £10, 1 \times £5$ (D) $3 \times £20, 1 \times £10, 1 \times £5$ B1 one or two shop(s) correct SC1 £20 notes 14 £10 notes 1 £5 notes 1
	Additional Guidance		
	Notes may be seen by the table		
	Mark intention for up to B2 eg allow tallies		
	Units may be implied eg Shop A = 20 20 20 5		B1

Q8. (2023)

Q	Answer	Mark	Comments
11(c)	Valid explanation	B1	eg needs brackets around $35 - 19$
	Additional Guidance		
	Any calculations shown must be correct		
	Ignore irrelevant, non-contradictory statements		
	It gives 25.5 and it should be 8	B1	
	(It gives the wrong answer,) it should be 8	B1	
	He shouldn't divide (by 2) first	B1	
	He needs brackets around the takeaway	B1	
	He needs to subtract first	B1	
	He should do $35 - 19$ and then divide by 2	B1	
	$(35 - 19) \div 2$ (may correct the given calculation by adding brackets)	B1	
	$\frac{35 - 19}{2}$ (implies the brackets)	B1	
	This gives 25.5 (or 51) when he needs 8 or 16	B1	
	$35 - 19 = 16$ $16 \div 2 = 8$ (needs to say that this is what he should do)	B0	
	This gives 25.5 (or 51) which is too much (needs to compare with 8 or 16)	B0	
	He hasn't used BIDMAS	B0	
	It gives the wrong answer	B0	
	$35 - 19 \div 2 = 8$	B0	
	$35 - 19 \div 2 = 25.50$	B0	
	He needs brackets	B0	

Q9. (2023)

Q	Answer	Mark	Comments	
17	45 × 8 or 360	M1	oe number of 2p coins may be embedded	
	45 × 8 × 2 or 360 × 2 or 720 or 7.2(0)	M1dep	oe value of 2p coins implied by 1170 or 11.7(0)	
	17.7(0) – their 7.2(0) – 45 × 0.1(0) or 1770 – their 720 – 45 × 10 or 6(.00) or 600	M1dep	oe value of 5p coins implied by 7.2 : 6 oe ratio not in simplest form or 6 : 7.2 oe ratio	
	6 : 5	A1	accept 1.2 : 1 or $\frac{6}{5} : 1$ or $1\frac{1}{5} : 1$ or 1 : 0.83(...) or 1 : $\frac{5}{6}$	
	Additional Guidance			
	Up to M3 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts			
	Allow working in pence or pounds throughout			
	Must work consistently in pence or pounds for the third mark (or recover)			
	Ignore units in the ratio eg 6p : 5p or £1.20 : £1		M3A1	
	720 may be seen in a ratio with the value of the 10p coins eg 720 : 450 or 7.2 : 4.5		M2	
	600 may be seen in a ratio with the value of the 10p coins eg 600 : 450 or 6 : 4.5		M3	
	For information:			
	Coin	10p	2p	5p
	Number	45	360	120
	Value	£4.50	£7.20	£6.00

Q10. (2023)

Q	Answer	Mark	Comments
23	$80 \times x$ or $80x$ or $x \times 80$ or $x80$ or $x \div 60$ or $\frac{x}{60}$ or $\frac{1}{60}x$ or $x \frac{1}{60}$ or $80 \div 60$ or $\frac{80}{60}$	M1	teabags per hour boxes per minute
	$\frac{80x}{60} \left(= \frac{4x}{3} \right)$ or $80 \div 60 \times x \left(= \frac{4x}{3} \right)$	A1	oe showing 80 and 60 and x eg $\frac{80 \times x}{60} \left(= \frac{4x}{3} \right)$ or $x \frac{80}{60} \left(= \frac{4x}{3} \right)$ or $\frac{80}{60} \times x \left(= \frac{4x}{3} \right)$ or $80x \div 60 \left(= \frac{4x}{3} \right)$
	Additional Guidance		
	M1 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	Do not allow M1 if only seen embedded in an incorrect expression or calculation eg $80x \times 4 = 320x$		M0
	$60 \times \frac{4x}{3} = 80x$ (M1 allowed as $80x$ is not embedded in an incorrect expression or calculation, A0 because using the given answer)		M1A0
	Condone $x = 80 \div 60$		M1A0
23	$\frac{80x}{60} \left(= \frac{4x}{3} \right)$		M1A1
	$\frac{80}{60} = \frac{4}{3}$ and $\frac{4}{3} \times x \left(= \frac{4x}{3} \right)$ $\frac{80}{60} = \frac{4}{3}$ and $\frac{4x}{3}$		M1A1 M1A0
	No equivalents allowed for M1		
	Ignore units		
	Condone 1.33(...) for $\frac{4}{3}$		
	Ignore non-contradictory working after M1A1 seen		

Q11. (2024)

Q	Answer	Mark	Comments
4(a)	9.03	B1	
	Additional Guidance		
	9.03p		B1
	903p on the answer line		B1
	903 on the answer line with £ not crossed out		B0

Q12. (2024)

Q	Answer	Mark	Comments
4(b)	2.56	B1	
	Additional Guidance		
	2.56p		B1
	256p on the answer line		B1
	256 on the answer line with £ not crossed out		B0

Q13. (2024)

Q	Answer	Mark	Comments
10(a)	$2 \times 8.5(0)$ or $17(.00)$	M1	oe
	$38 - \text{their } 17$ or 21	M1dep	
	$\text{their } 21 \div 5$ or 4.2	M1dep	oe eg $5 \times 4.2(0)$
	4.20	A1	correct money notation SC2 5.90 SC1 5.9
	Additional Guidance		
	Special case is for using 1 metre of linen at £8.5(0)		
	Allow 4.20(p) for the A mark		
	$4.20 \div 5 = 84p$		M1M1M1 A0