

Q1. (2018)

7	All four correct	B3	B2 for any two or three correct B1 for any one correct
	Additional Guidance		
	$P = 3x + 4y$	Identity	
	$3x + 6 \equiv 3(x + 2)$	Equation	
	$3x + 2 = 14$	Formula	
	$3x + 2$	Inequality	
	$3x + 2 < 14$	Expression	
Do not accept two lines from an algebra box			

Q2. (2019)

11(b)	$(y =) \frac{x}{2} + 4$	B1	oe eg $(y =) 0.5x + 4$ or $(y =) \frac{x+8}{2}$
	Additional Guidance		
	Condone $x + 2 + 4$	B1	

Q3. (2020)

Q	Answer	Mark	Comments
18	$10 \times x$ or $10x$	M1	oe
	$T = 15 + 10x$	A1	oe eg $T = 10x + 15$ allow $T = 15 + 10 \times x$
	Additional Guidance		
	Condone $x10$ for $10x$ for M mark		
	Ignore units		
	$15 + 10x = T$		M1A1
	Condone a correct rearrangement after $T = 15 + 10x$ seen eg $T - 15 = 10x$ or $x = \frac{T-15}{10}$		M1A1
	Do not ignore further incorrect working eg $T = 15 + 10x$ and $T = 25x$		M1A0
	$T = 5 \times 3 + 10 \times x$		M1A0
	$15 + 10x$		M1A0

Q4. (2019)

25	Alternative method 1 – PQ as the unknown		
	$x + 10$ or $2(x + 10)$	M1	any unknown
	$x + x + 10 + 2(x + 10) = 170$	M1dep	oe any consistent unknown x + their two expressions (with at least one correct) = 170
	$4x + 30 = 170$	M1dep	oe $4x = 140$ must be correct
	35	A1	
	Alternative method 2 – PR as the unknown		
	$x - 10$ or $2x$	M1	any unknown
	$x + x - 10 + 2x = 170$	M1dep	oe any consistent unknown x + their two expressions (with at least one correct) = 170
	$4x - 10 = 170$ or $x = 45$	M1dep	oe $4x = 180$ must be correct
	35	A1	
	Alternative method 3 – QR as the unknown		
	$\frac{x}{2}$ or $\frac{x}{2} - 10$	M1	any unknown
	$x + \frac{x}{2} + \frac{x}{2} - 10 = 170$	M1dep	oe any consistent unknown x + their two expressions (with at least one correct) = 170
	$2x - 10 = 170$ or $x = 90$	M1dep	oe $2x = 180$ must be correct
	35	A1	
25 cont	Alternative method 4 – trial and improvement with addition of three lengths		
	A correctly evaluated trial with a difference of 10 (km) between the two shorter lengths and the longest length twice the length of the middle length	M1	may be seen as a subtraction of three numbers from 170
	A different correctly evaluated trial with a difference of 10 (km) between the two shorter lengths and the longest length twice the length of the middle length	M1dep	may be seen as a subtraction of three numbers from 170
	35, 45 and 90	A1	
	35	A1	
	Alternative method 5 – trial and improvement with subtraction from 170		
	A correctly evaluated trial of two lengths subtracted from 170 with a difference of 10 (km) between the two lengths or one length twice the length of the other	M1	
	A different correctly evaluated trial of two lengths subtracted from 170 with a difference of 10 (km) between the two lengths or one length twice the length of the other	M1dep	
	35, 45 and 90	A1	
	35	A1	

25 cont	Additional Guidance	
	If the student attempts more than one method, mark each method and award the highest mark	
	Alt 1 $PQ + PQ + 10 + 2(PQ + 10) = 170$	M1M1
	Alt 1 $PQ + PQ + 10 + 2PR = 170$	M1
	Alt 2 $x, x + 10$ and $2x$ seen on diagram, $4x + 10 = 170$	M1M1M0A0
	Alt 4 $35 + 45 + 90$ with no choice made	M1M1A1A0
	Alt 4 $170 - 30 - 40 - 80 = 20$	M1
	Alt 4 $170 - 30 - 40 - 60 = 40$ incorrect number is doubled	M0
	Alt 5 $170 - 30 - 60 = 80$	M1

Q5. (2020)

Q	Answer	Mark	Comments
18	$10 \times x$ or $10x$	M1	oe
	$T = 15 + 10x$	A1	oe eg $T = 10x + 15$ allow $T = 15 + 10 \times x$
	Additional Guidance		
	Condone $x10$ for $10x$ for M mark		
	Ignore units		
	$15 + 10x = T$		M1A1
	Condone a correct rearrangement after $T = 15 + 10x$ seen eg $T - 15 = 10x$ or $x = \frac{T-15}{10}$		M1A1
	Do not ignore further incorrect working eg $T = 15 + 10x$ and $T = 25x$		M1A0
	$T = 5 \times 3 + 10 \times x$		M1A0
	$15 + 10x$		M1A0

Q6. (2022)

Q	Answer	Mark	Comments
18	b and c	B1	