

Q1. (2017)

21(a)	Ticks No and gives valid reason	B1	Examples of valid reasons: translation (by $\begin{pmatrix} 6 \\ 0 \end{pmatrix}$) $\begin{pmatrix} 6 \\ 0 \end{pmatrix}$ or $\begin{pmatrix} 6 \\ 0 \end{pmatrix}$ or (6, 0) rotation (of 180°), (centre (0, 2.5)) enlargement (of scale factor) -1 (about (0, 2.5))
	Additional Guidance		
	Full descriptions are not needed, but if given must be correct For the enlargement, the scale factor of -1 must be given		
	Transformation (6, 0)		B1
	Moved 6 to the right		B1
	Moved 6 squares		B0
	Condone 'turn' with full description of 180°, (centre) (0, 2.5)		B1
	2 or more single transformations given, with at least 1 correct		B1

Q2. (2017)

21(b)	Enlargement, scale factor -2, centre (-1, 0)	B3	B2 Enlargement, scale factor -2 or enlargement centre (-1, 0) or scale factor -2, centre (-1, 0) B1 (Triangle with) vertices at (0, -1) (0, -3) and (3, -2) or enlargement or scale factor -2 or scale factor 2
	Additional Guidance		
	'Scale factor' and 'centre' may be implied eg enlargement, -2, (-1, 0)		B3
	Allow '-1 on the x-axis' for (-1, 0)		
	No triangle on diagram, but vertices stated as coordinates and no other marks awarded		B1
	A combination of transformations can score a maximum of 1 mark for the triangle drawn or vertices identified		
	Correct triangle drawn and 'enlargement', with no other marks awarded		B1
	Enlargement, (scale factor) $-\frac{1}{2}$, centre (-1, 0)		B2

Q3. (2021)

Question	Answer	Mark	Comments
29	Alternative method 1		
	Rotation, 180°, (about) (-1, 1)	B3	B2 rotation, 180° or rotation (about) (-1, 1) or turn, 180° (about) (-1, 1) B1 rotation or turn, 180° or turn (about) (-1, 1)
	Alternative method 2		
	Enlargement, scale factor -1 (with centre) (-1, 1)	B3	B2 enlargement, scale factor -1 B1 enlargement (with centre) (-1, 1)
	Alternative method 3		
	Reflection in (-1, 1)	B3	there are no part marks in this method
	Additional Guidance		
	Allow B instead of (-1, 1) throughout		
	Compound transformation		B0

Q4. (2024)

Q	Answer	Mark	Comments
11	Enlarge(ment)	B1	
	$\frac{1}{2}$	B1	oe condone half
	(1, -7)	B1	condone missing bracket(s)
	Additional Guidance		
	For the third mark, a vector on its own does not imply a translation		
	Do not accept halved or half the size		
	Multiple transformations stated or implied		B0B0B0