

1	Translation $\begin{pmatrix} -4 \\ 3 \end{pmatrix}$	2	<b>B1</b> for translation or $\begin{pmatrix} -4 \\ 3 \end{pmatrix}$ with no further properties
2	Correct coordinates (-2,-2), (-2, -3), (-5,-3)		
3	Translation $\begin{pmatrix} 4 \\ -2 \end{pmatrix}$	2	<b>B1</b> for each
4(a)	Translation $\begin{pmatrix} -3 \\ 4 \end{pmatrix}$	2	<b>B1</b> for translation <b>B1</b> for $\begin{pmatrix} -3 \\ 4 \end{pmatrix}$
5(a)(i)	Triangle B at (4, -1), (4, -4), (5, -4)	2	<b>B1</b> For triangle B the correct size and orientation
6(a)	Correct reflection (5, 2), (5, 5), (4, 2)	2	<b>B1</b> for reflection in $y = 1$ or reflection in $x = m$ where $-4 \leq m \leq 1.5$
7(a)(i)	Reflection $x$ -axis or $y = 0$	2	<b>B1</b> for each
7 (ii)	$\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$	2	<b>B1</b> for second column correct or <b>SC1</b> for answer $\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$
8	Reflection $y = -1$	2	<b>B1</b> for either
9	$y = -1$ oe	1	
10 a	$\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$	1	
b	$\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$		
c	$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$		
d	$\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$		
11	Triangle at (-1, -2), (-1, 4), (-4, -2)	2	<b>B1</b> for correct size and orientation but wrong centre

12 (a)	Triangle at (2, 0), (1, 0), (1, 2)	2	<b>B1</b> for two vertices correct or two correct pairs of coordinates soi
13(a)	Triangle <i>C</i> at (-4, 1), (-4, 2), (-6, 2)	2	<b>B1</b> for triangle correct size and orientation, wrong centre or <b>SC1</b> for a triangle with vertices at (0, 2), (0, 3), (2, 2) or (-4, 4), (-4, 5), (-6, 4)
14(a)	Enlargement Scale factor -3 Centre (-3, 2)	3	<b>B1</b> for each
15(a)	Correct enlargement, vertices (2, 5), (6, 5), (6, 3)	2	<b>B1</b> for correct size and orientation, incorrect position or for enlargement scale factor 2, centre (0, 3)
16(a)	Triangle at (4, 2), (4, 3), (2, 3)	2	<b>B1</b> for correct size and orientation but wrong position or <b>SC1</b> for triangle at (-4, -2), (-2, -3), (-4, -3)
17(a)	Rotation 90° clockwise oe (1, -1)	3	<b>B1</b> for each
18(a)	$\begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix}$	2	<b>B1</b> for one correct row or column or Rotation, 90° anticlockwise about (0, 0)
19(a)	Correct transformation, vertices (5, -1), (6, -1), (6, -3), (5, -2)	2	<b>B1</b> for three vertices correct or three correct pairs of coordinates soi
20(a)	Correct transformation, vertices (-1,4), (-1, 6), (-2, 6)	2	<b>B1</b> for three vertices correct or three correct pairs of coordinates soi