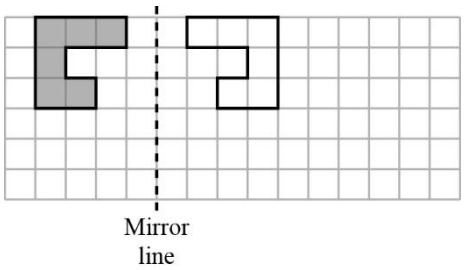
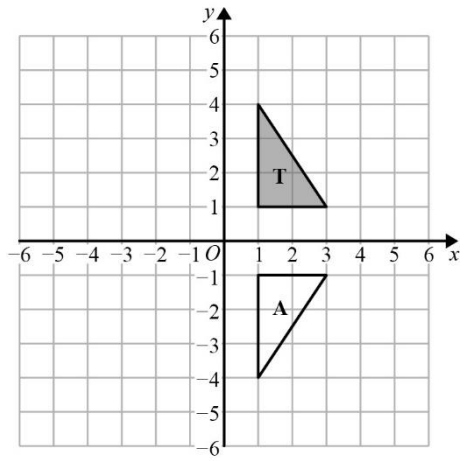
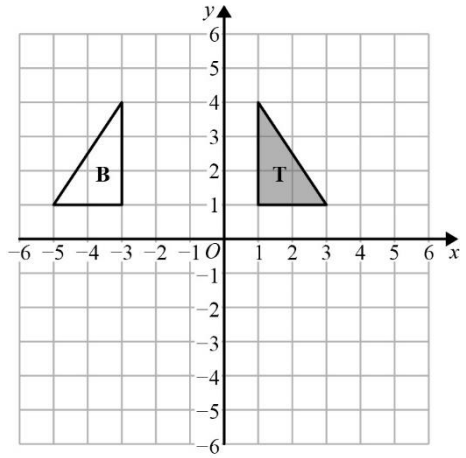
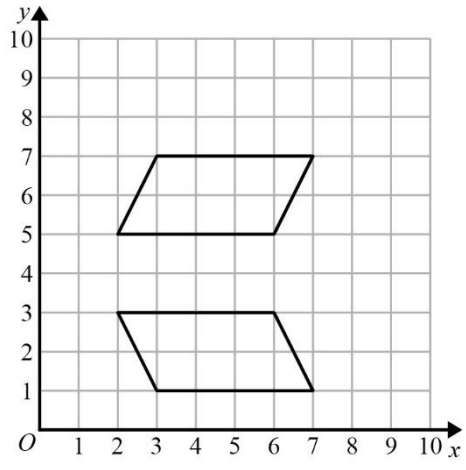
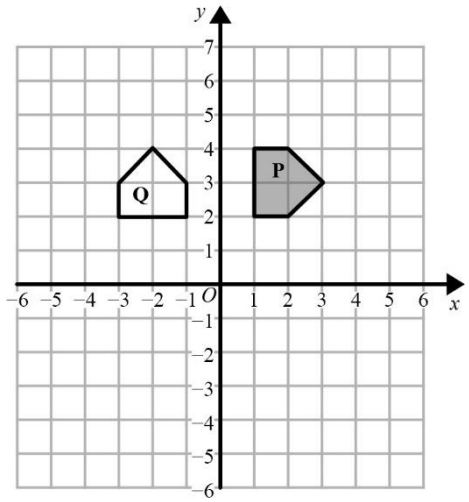
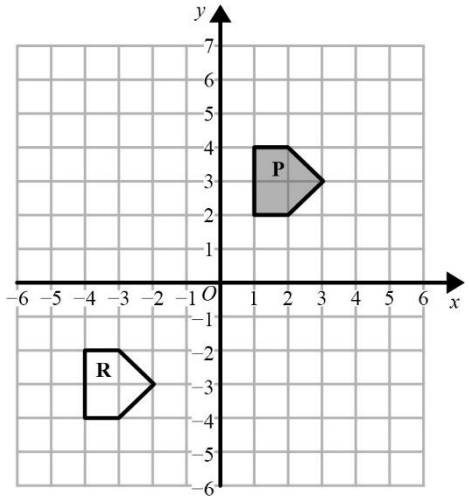
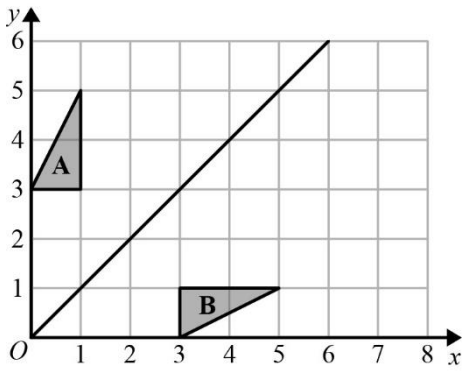
The following marks are awarded for each question.

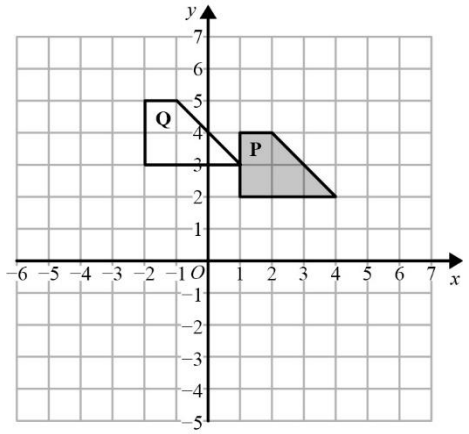
B	Unconditional accuracy mark
M	Method mark – the correct method must be shown but there may be an arithmetic error; the sight of the value given in brackets implies the award of the method mark
A	Accuracy mark – unless the question specifies that working **must** be shown then the sight of the correct answer implies the award of full marks (unless the answer clearly comes from incorrect working)
C	Communication mark
P	Process mark to show correct process for problem solving. Any other process of a similar standard to achieve an accurate result is acceptable to achieve this mark
FT	Incorrect values may be **followed through** from one step to the next **provided** that the correct method is seen in each step and the only errors are arithmetic. This is shown in mark schemes by putting a number in inverted commas
OE	Or equivalent answer mark

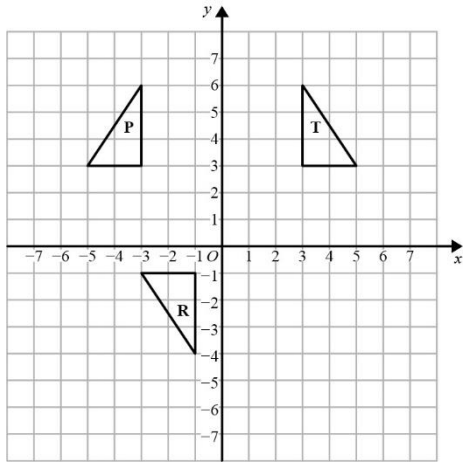
Q	Answer	Mark	Comment
1		B2	B1 for correct reflection in a line parallel to the mirror line
3	3	B1	

5a		B2	B1 for correct reflection in a line parallel to the *x*-axis or two points correctly reflected
5b		B2	B1 for correct reflection in a line parallel to the *y*-axis or two points correctly reflected

7		B2	B1 for parallelogram reflected in a line parallel to the *x*-axis

9a		B2	B1 for correct shape incorrect orientation or rotation 90° clockwise centre *O*
9b		B2	B1 for translation $\begin{pmatrix} -5 \\ k \end{pmatrix}$ or $\begin{pmatrix} k \\ -6 \end{pmatrix}$
11		B2	B1 for line $y = x$ drawn

13a	rotation 90° clockwise, centre $(-2, 3)$ **Note**: B0 for a combination of transformations	B1	for rotation
		B1	for rotation 90 clockwise or −90 or +270 or 270 anticlockwise
		B1	for $(-2, 3)$
13b		B2	B1 for translation $\begin{pmatrix} -3 \\ k \end{pmatrix}$ or $\begin{pmatrix} k \\ 1 \end{pmatrix}$

15a	Reflection in the *y*-axis	B1	for reflection
		B1	for in the *y*-axis or in $x = 0$
15b		B3	B2 for correct rotation, incorrect centre i.e. correct orientation B1 for one correct line

Question	Topic	Step	Mark
1	Recognise and visualise the reflection in a mirror line of a 2D shape	2nd	2
3	Find the scale factor of enlargement where the scale factors is a positive whole number	6th	1
5a	Reflect shapes in the x-or y-axes	4th	2
5b	Reflect shapes in a mirror line parallel to the x or y axis	5th	2
7	Reflect shapes in a mirror line parallel to the x or y axis	5th	2
9a	Rotate shapes about $(0, 0)$ given an angle of 90^o ,180^o or 270^o and direction of turn	5th	2
9b	Translate a shape using a vector	7th	2
11	Reflect shapes on a mirror line such as $y = x$, $y = -x$	6th	2
13a	Describe a transformation	7th	3
13b	Translate a shape using a vector	7th	2
15a	Describe reflections on a coordinate grid	7th	2
15b	Rotate shapes about a centre of rotation other the $(0, 0)$ given an angle of 90^o ,180^o or 270^o and direction of turn	6th	3