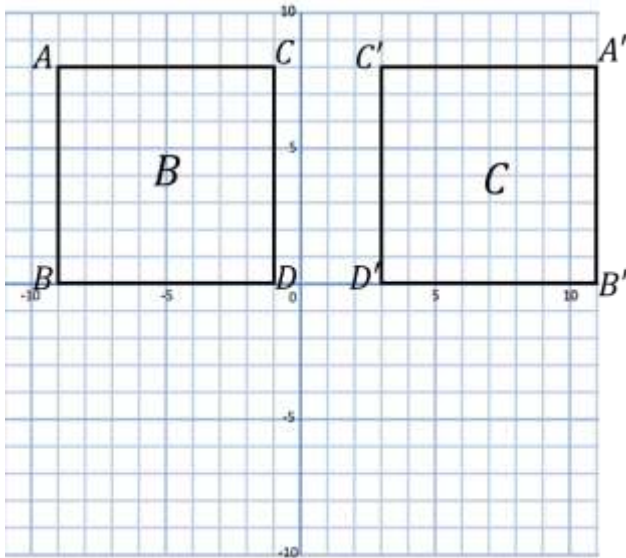


Transformations worksheet

Q1.

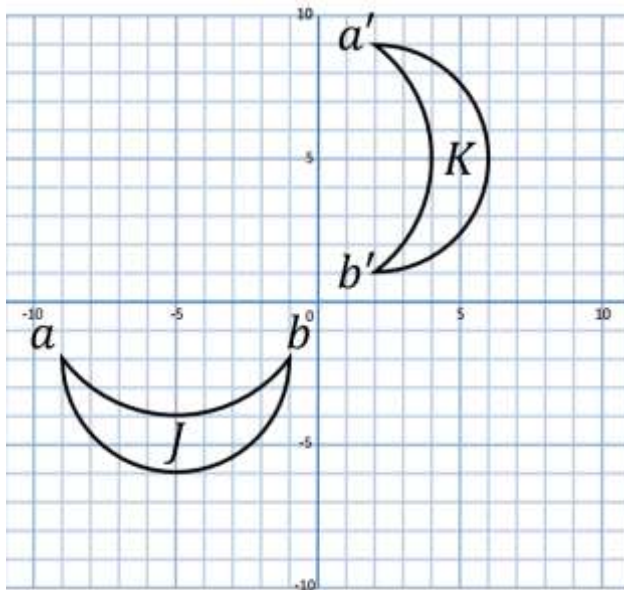
Describe the transformation that maps shape *B* onto shape *C*.



.....[2]

Q2.

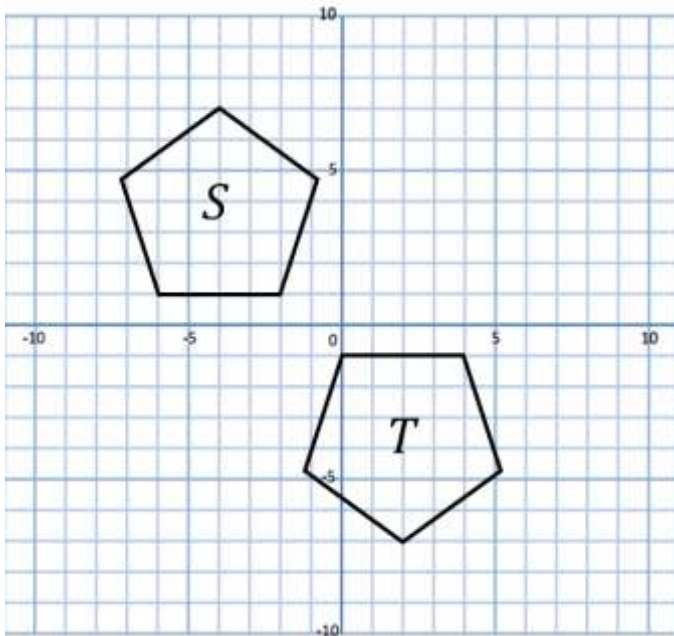
Describe the transformation that maps shape *K* onto shape *J*.



.....[2]

Q3.

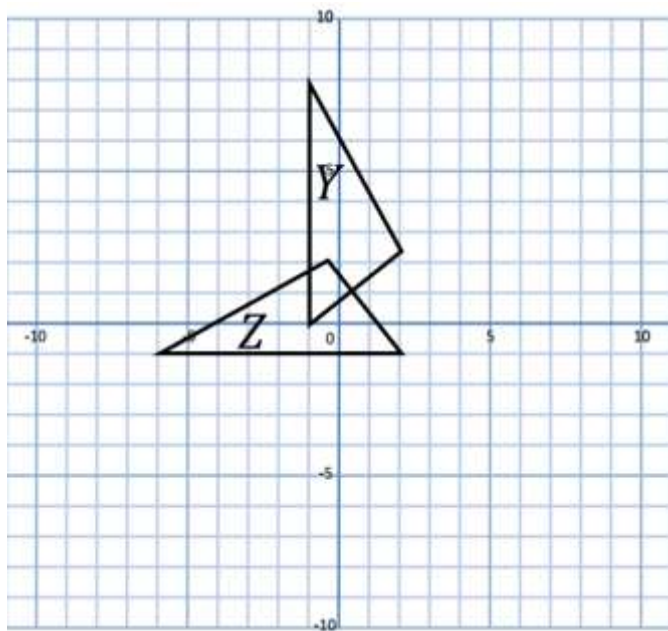
Describe fully, the single transformation that maps S onto T .



.....[3]

Q4.

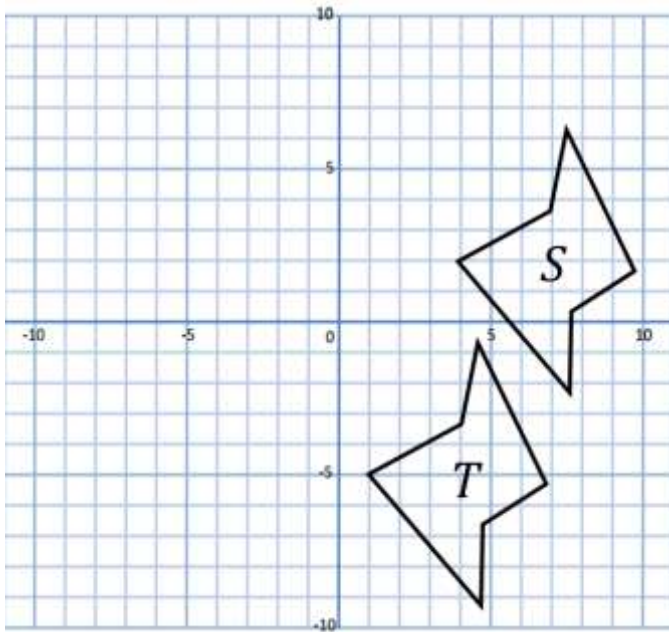
Describe fully, the single transformation that maps Y onto Z .



.....[3]

Q5.

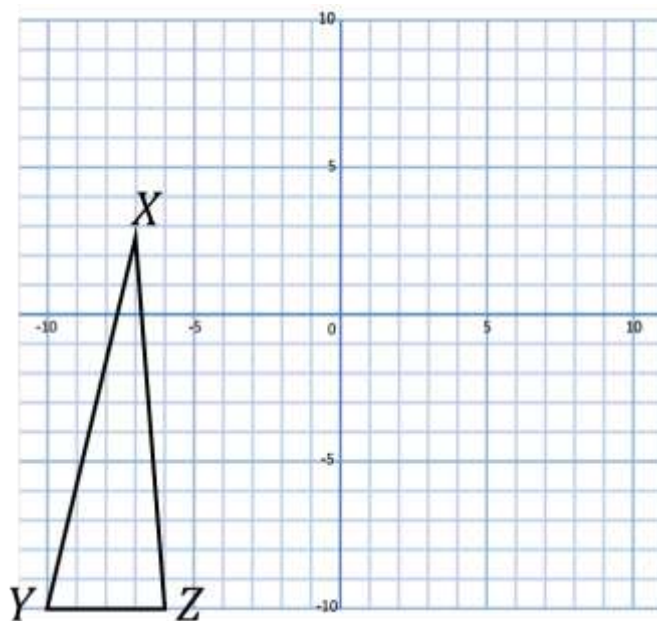
Describe fully, the single transformation that maps S onto T .



.....[2]

Q6.

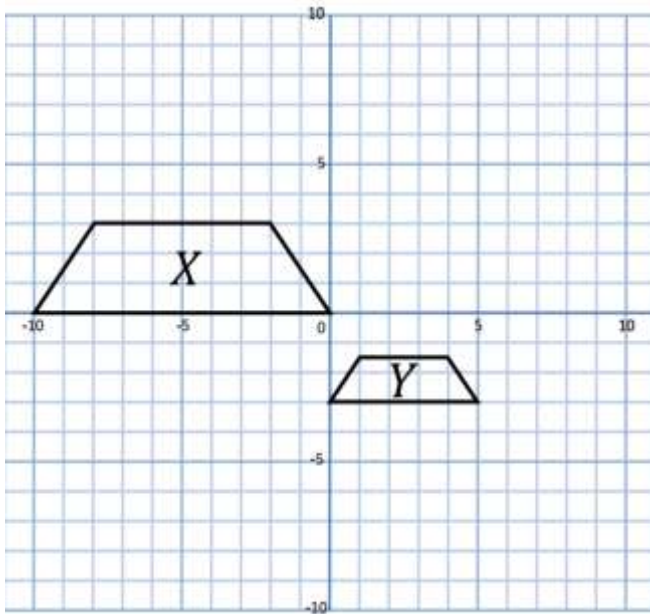
Translate XYZ by the vector $\begin{pmatrix} 4 \\ 5 \end{pmatrix}$



[2]

Q7.

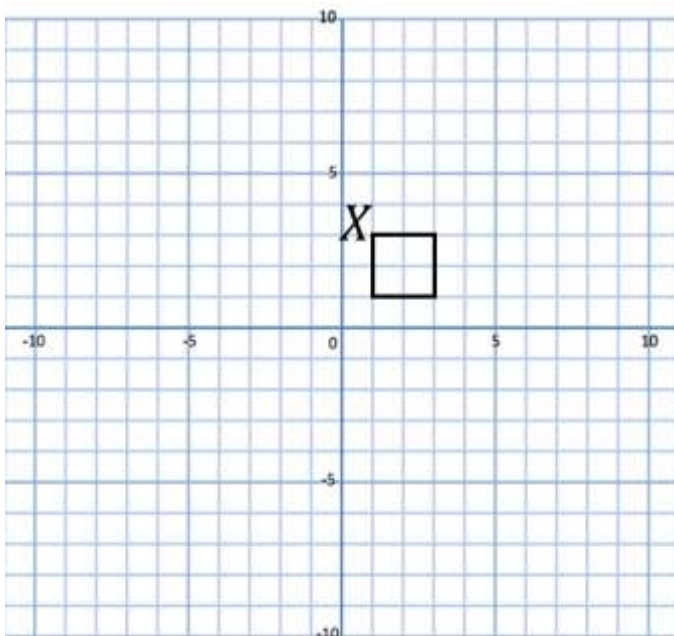
Describe fully, the single transformation that maps X onto Y .



.....[3]

Q8.

Enlarge the square by a scale factor of -2 , centre $(0,0)$. Give the new co-ordinates of point X .



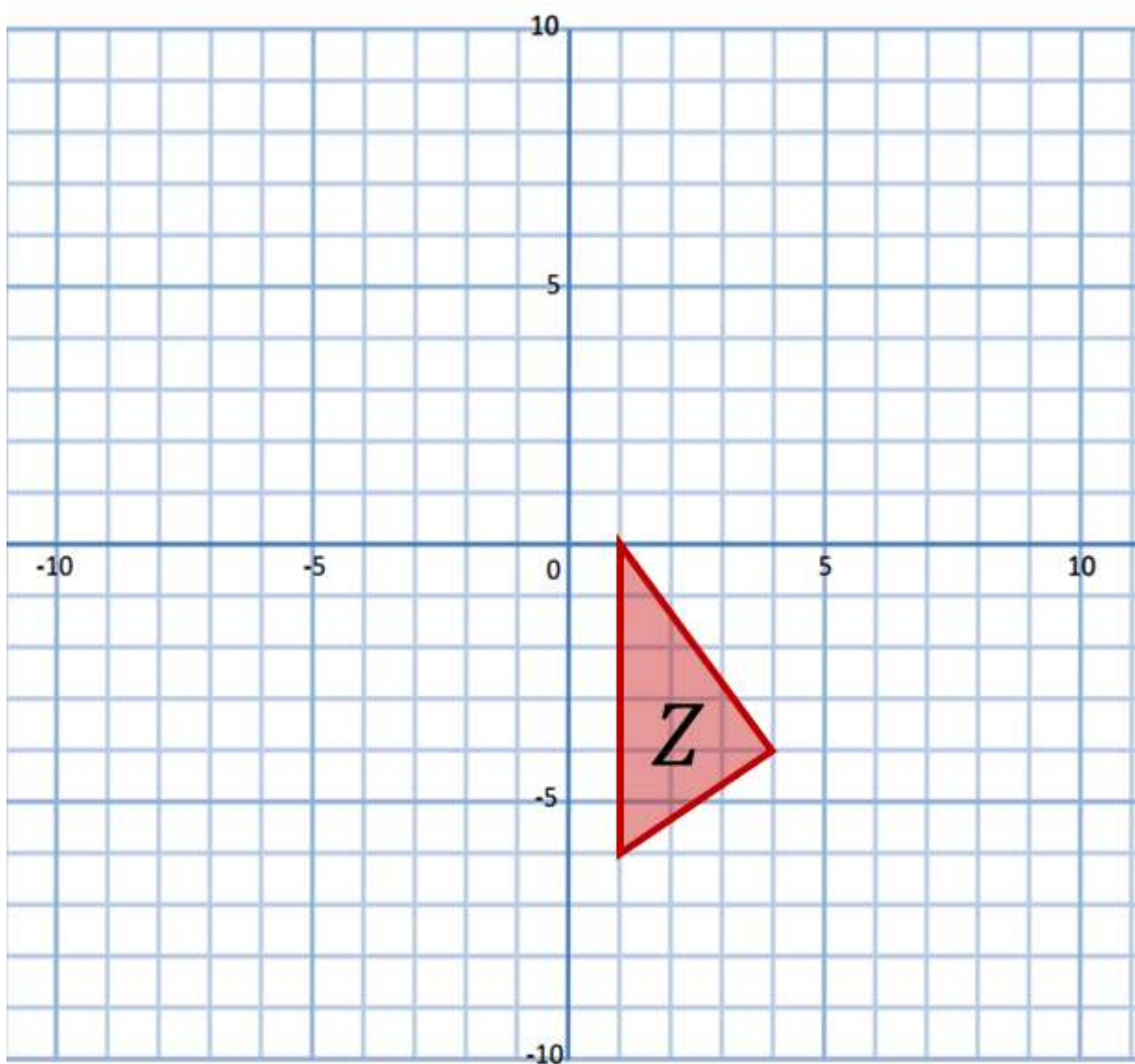
$X' = \dots\dots\dots$ [2]

Q8. EZY MATHS
A02
EZY MATHS

Triangle X has vertices $A (-2,1)$, $B (-8,1)$ and $C (-6,4)$,

- (a) Rotate Triangle X 90° clockwise about the origin. Label this shape Y and give the new co-ordinates for A .

$A' = \dots\dots\dots$ [2]



- (b) Describe fully the single transformation that maps Y onto Z

..... [2]

Answers

1. Reflection in the line $x = 1$
2. Reflection in the line $y = -x$
3. Rotation, 180° about $(-1,0)$
4. Rotation 90° anticlockwise about $(1,1)$
5. Translation $\begin{pmatrix} -3 \\ -7 \end{pmatrix}$
6. Correct translation of shape 4 units right and 5 units up
7. Enlargement scale factor 0.5 or $\frac{1}{2}$ from $(10, -6)$
8. $(-2, -6)$
9. $A' = (1,2)$
Reflection in the line $y = 1$