

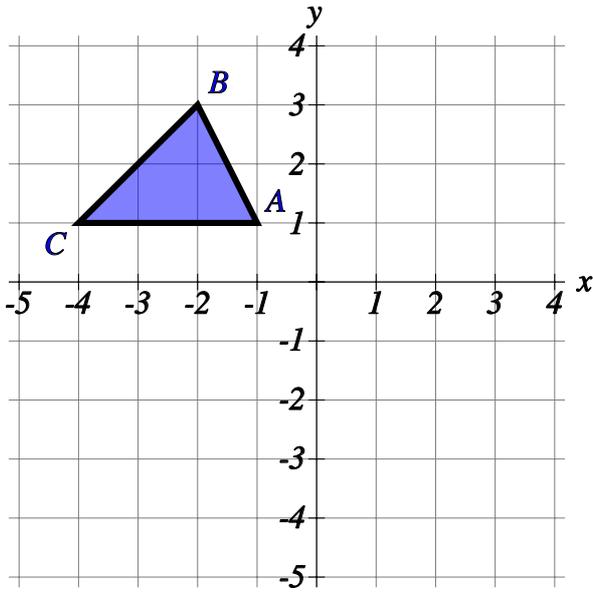
# Transformations

Name:	Class:	Date:
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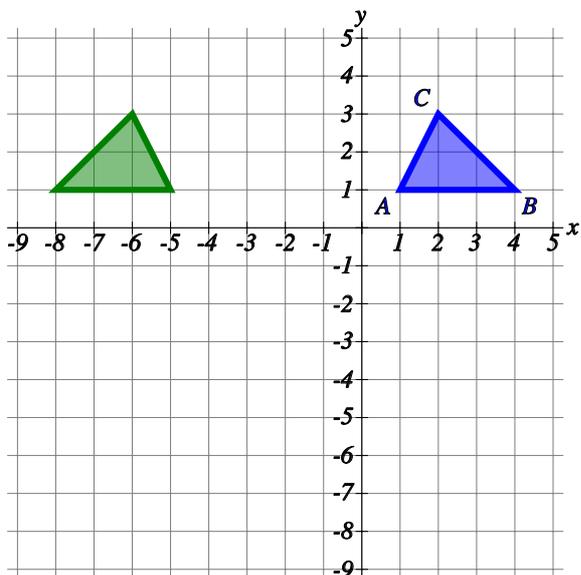
1) Reflect the triangle ABC in the x-axis.  
Give the coordinates of the image point C'

[1]

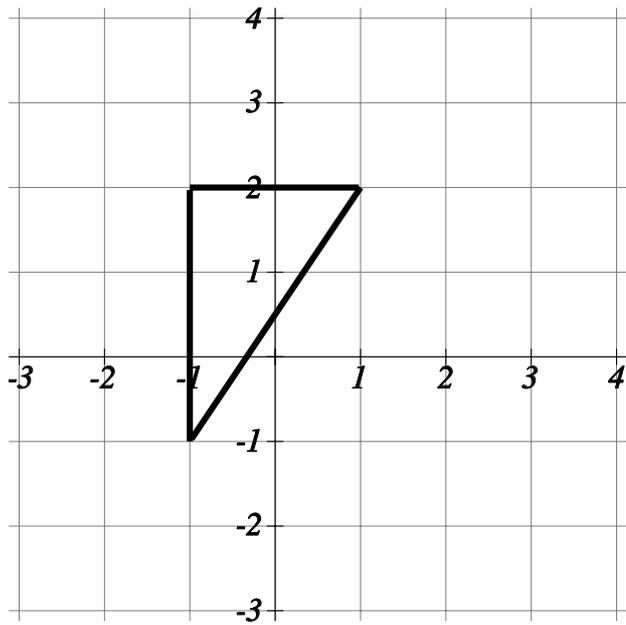


2) Fully describe the single transformation from the triangle ABC to its image

[1]



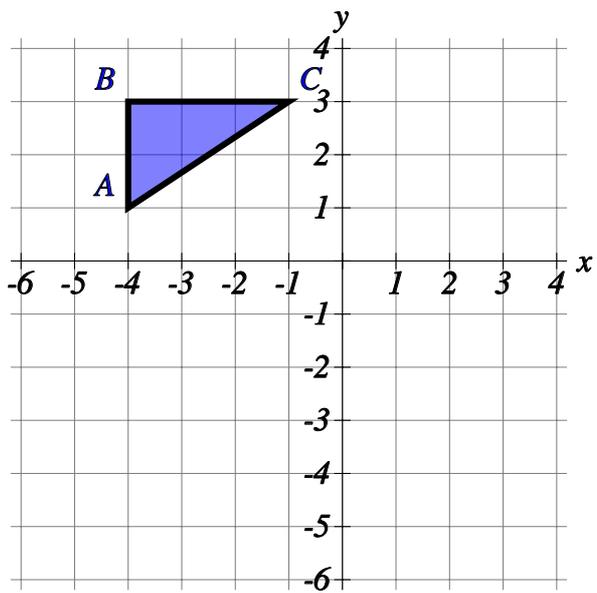
3) Reflect the shape in y axis.



4) Rotate the triangle ABC 180° about centre (-1,-1).  
Give the coordinates of the image point A'

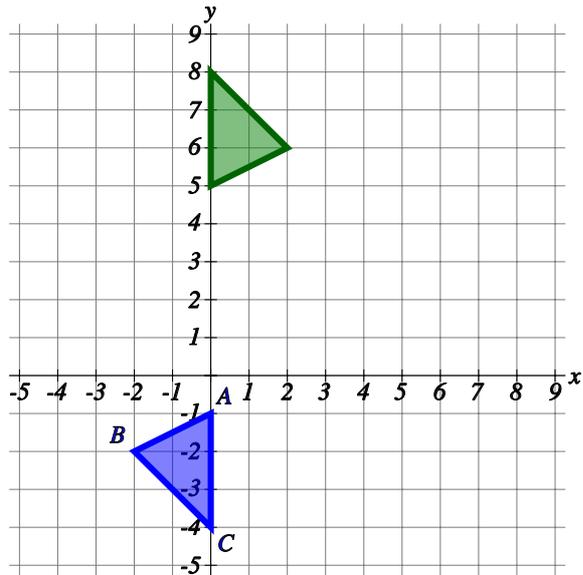
[1]

[1]

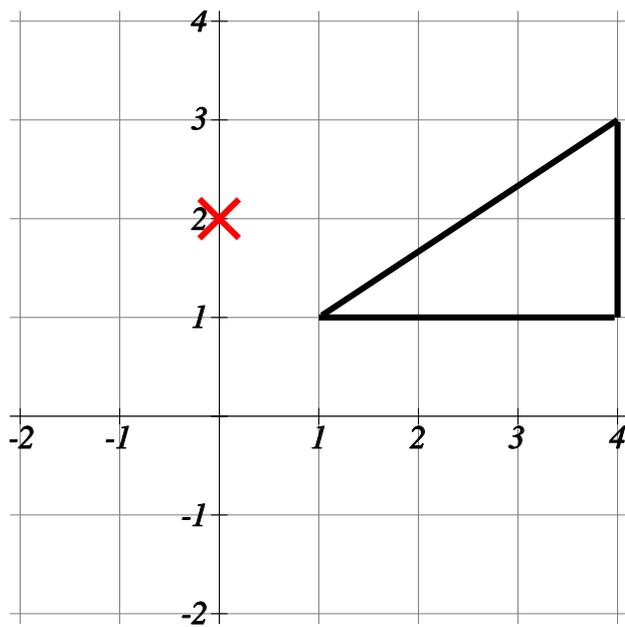


5) Fully describe the single transformation from the triangle ABC to its image

[1]

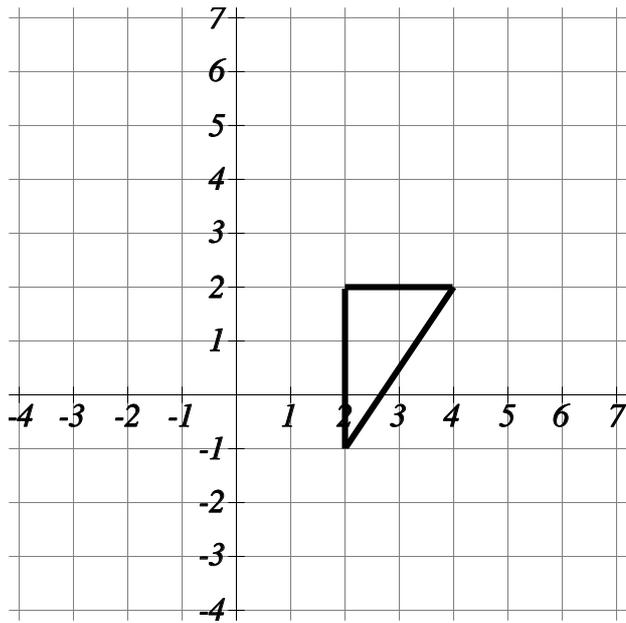


6) Rotate the shape  $90^\circ$  clockwise about centre (0,2).



[1]

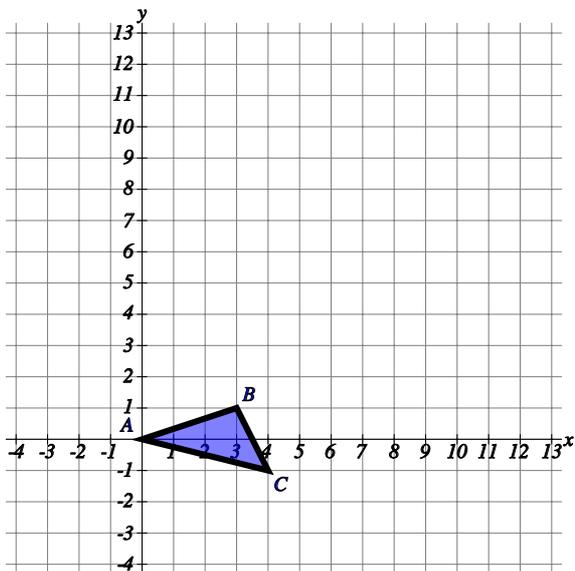
7) Translate the shape by the vector  $\begin{pmatrix} -2 \\ 0 \end{pmatrix}$ .



[1]

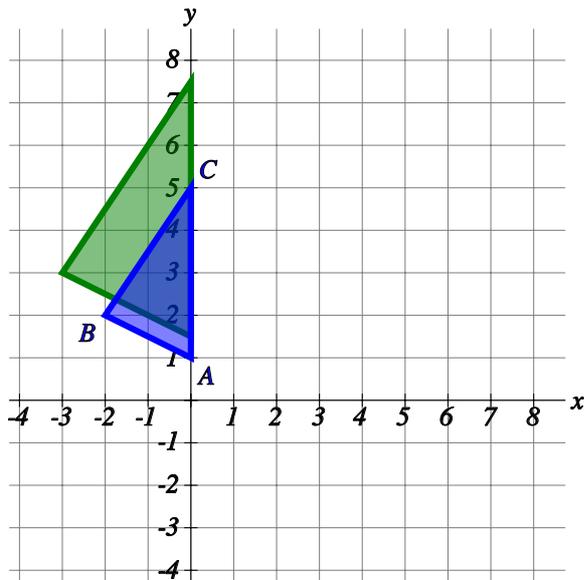
8) Enlarge the triangle ABC from centre (0,0) by scale factor 3.  
Give the coordinates of the image point B'

[1]

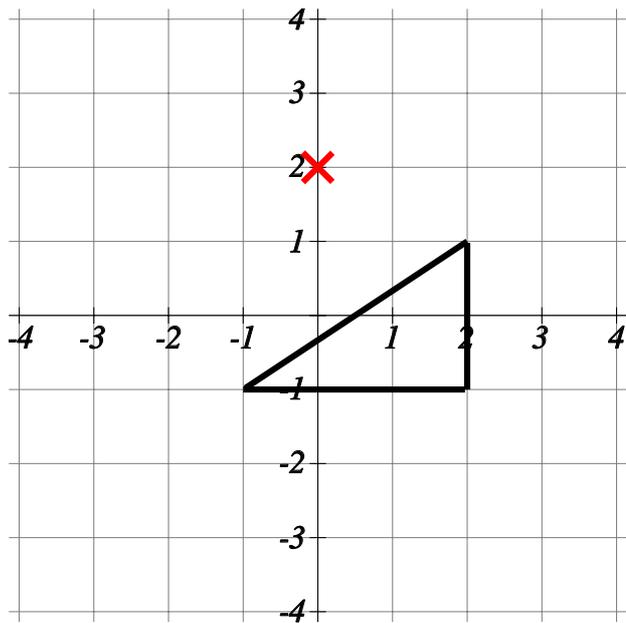


9) Fully describe the single transformation from the triangle ABC to its image

[1]



10) Enlarge the shape from centre (0,2) by scale factor 2.

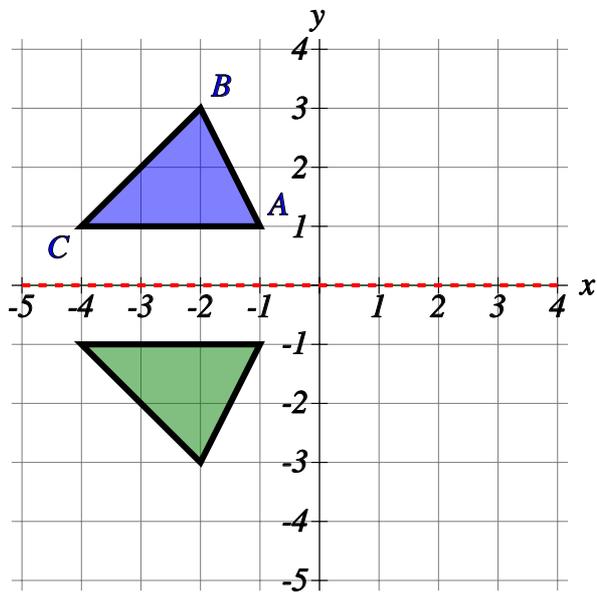


[1]

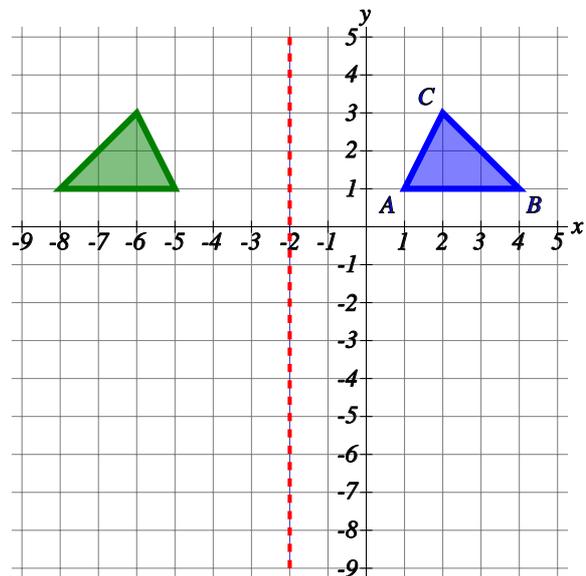
## Solutions for the assessment Transformations

1)

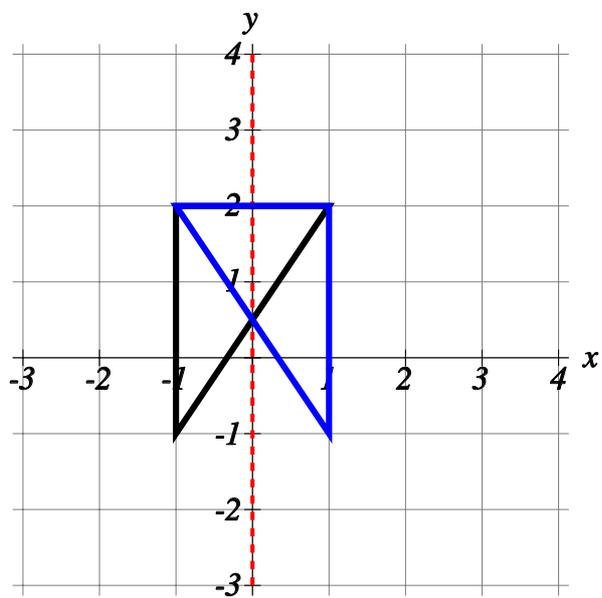
Reflection in the x-axis gives image point  $C' = (-4, -1)$



2) reflection in  $x = -2$

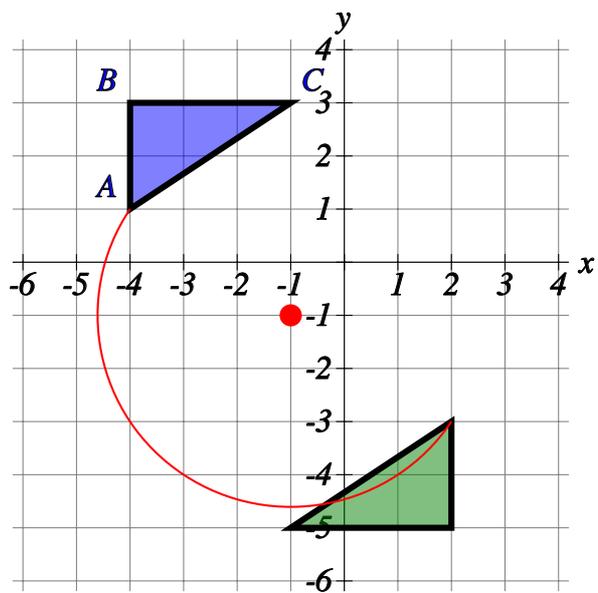


3)

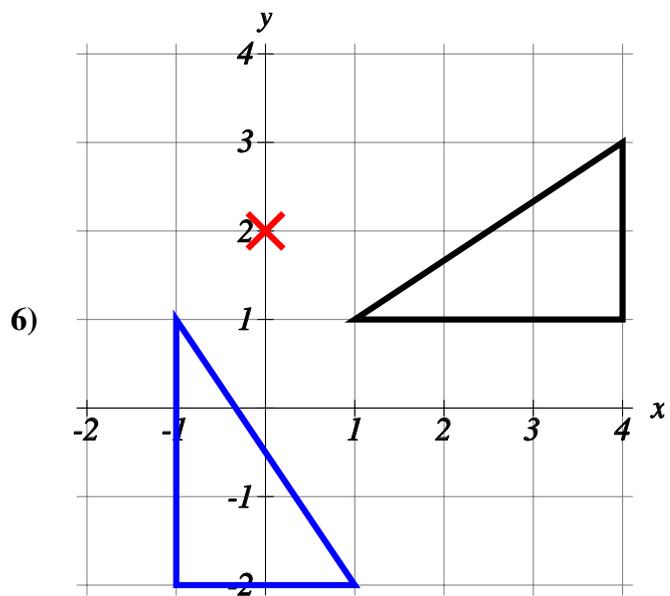
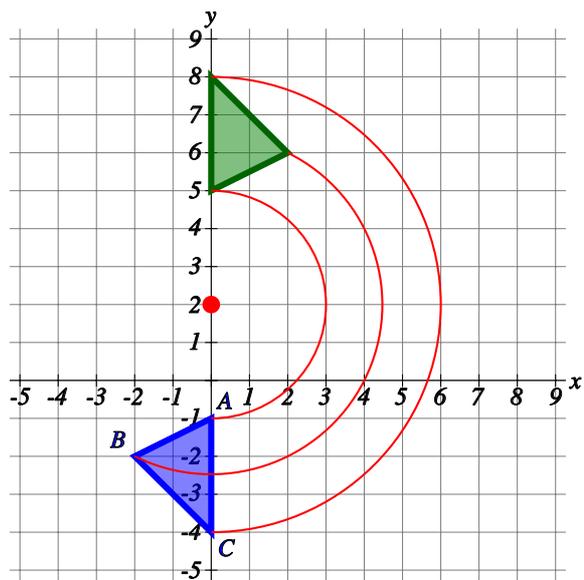


4)

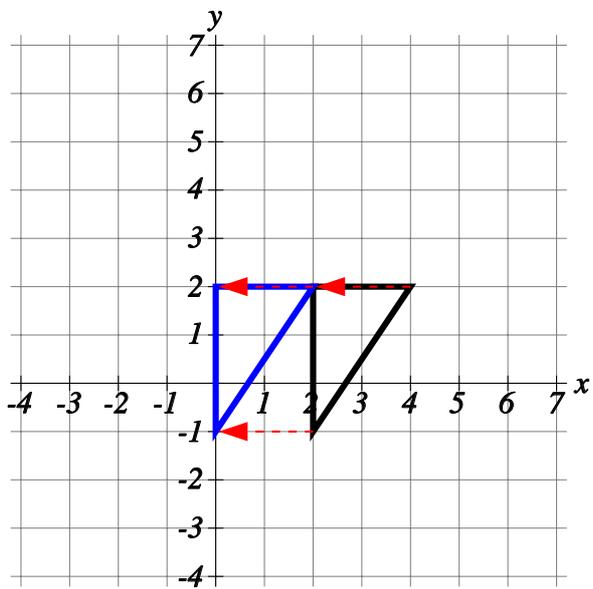
Rotation  $180^\circ$  about centre  $(-1, -1)$  gives image point  $A' = (2, -3)$



5) rotation  $180^\circ$  about  $(0,2)$

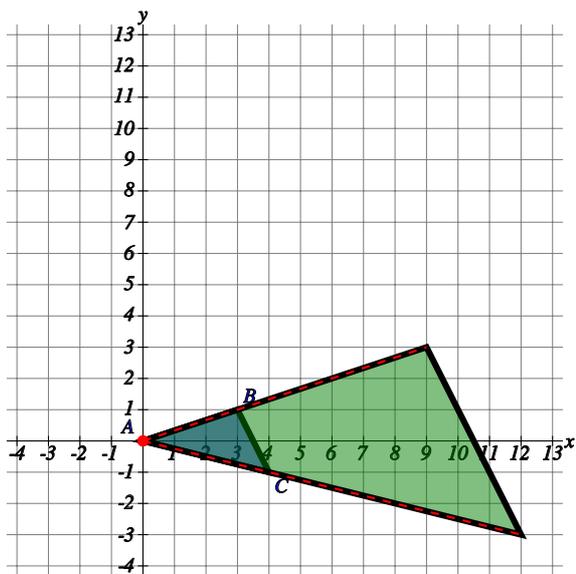


7)

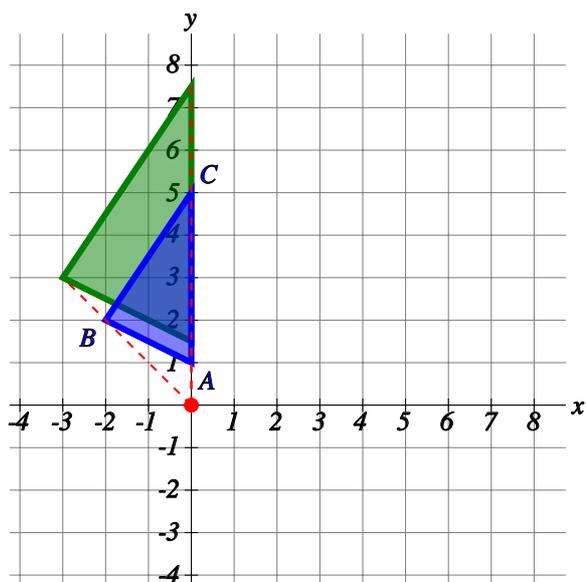


8)

Enlargement from centre (0,0) by scale factor 3 gives image point  $B' = (9,3)$



9) enlargement scale factor 1.5 centre (0,0)



10)

