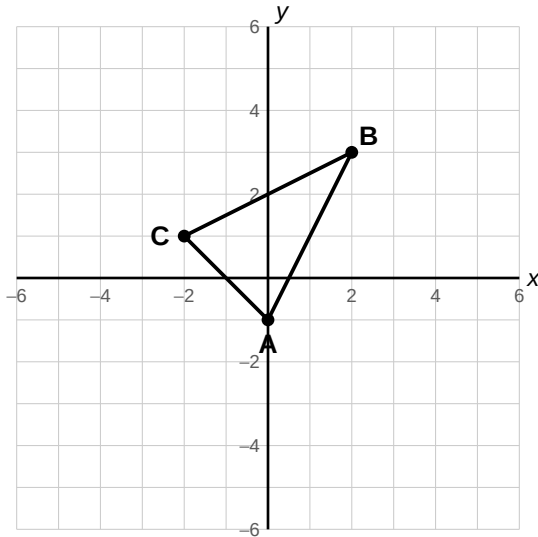


Enlargements

Dilate each figure about the origin. Draw the image, label it with prime marks (A' , B' , ...), and write its coordinates.

1.

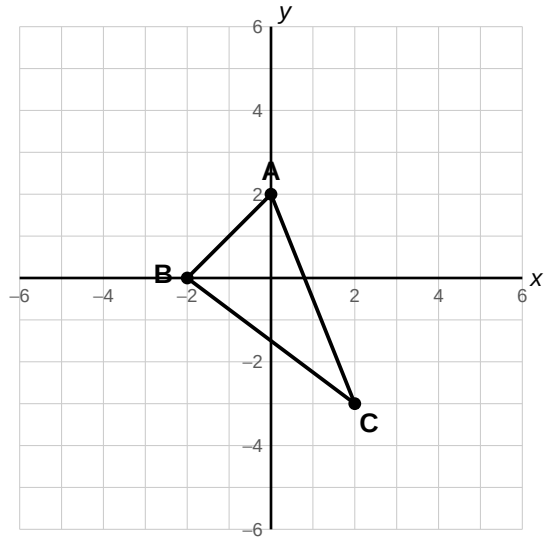


Dilate by a scale factor of 2.

$A' =$ _____ $B' =$ _____

$C' =$ _____

2.

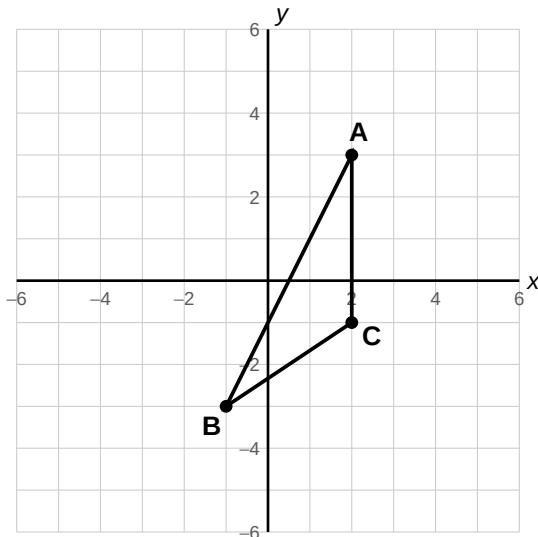


Dilate by a scale factor of 2.

$A' =$ _____ $B' =$ _____

$C' =$ _____

3.

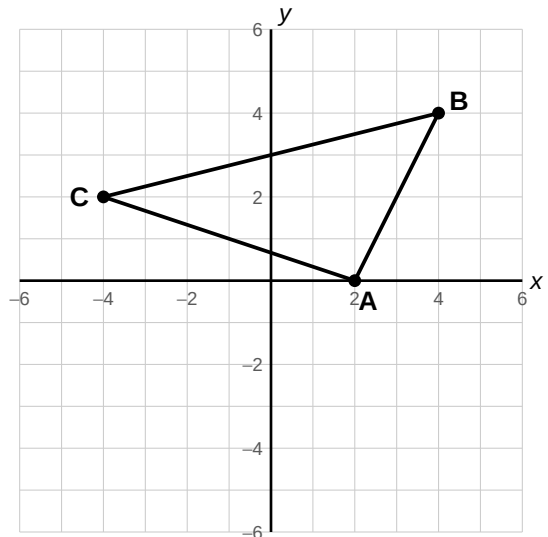


Dilate by a scale factor of 2.

$A' =$ _____ $B' =$ _____

$C' =$ _____

4.



Dilate by a scale factor of $\frac{3}{2}$.

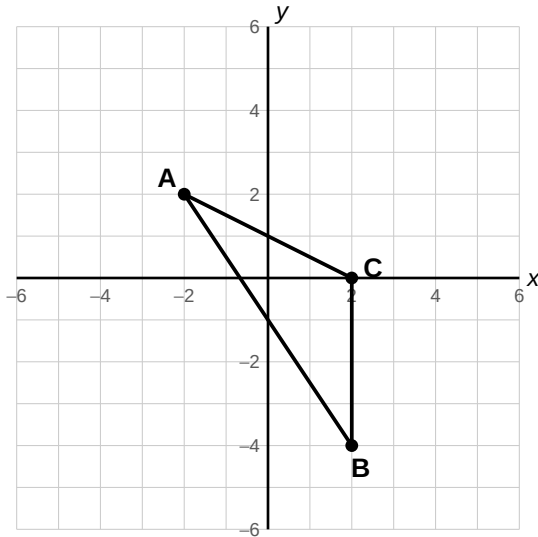
$A' =$ _____ $B' =$ _____

$C' =$ _____

Reductions

Dilate each figure about the origin. Draw the image, label it with prime marks (A' , B' , ...), and write its coordinates.

1.

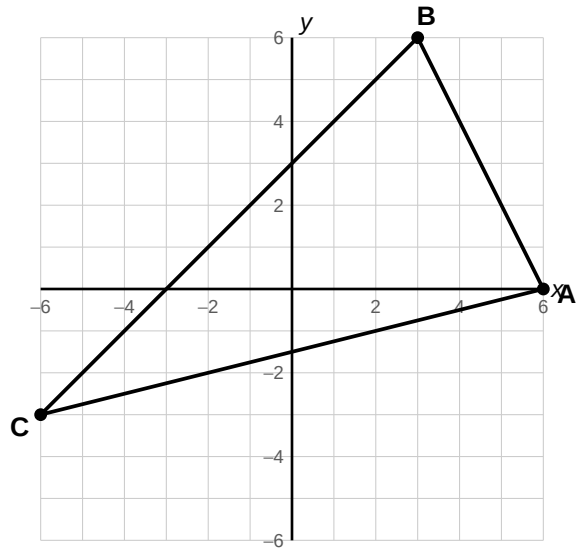


Dilate by a scale factor of $1/2$.

$A' =$ _____ $B' =$ _____

$C' =$ _____

2.

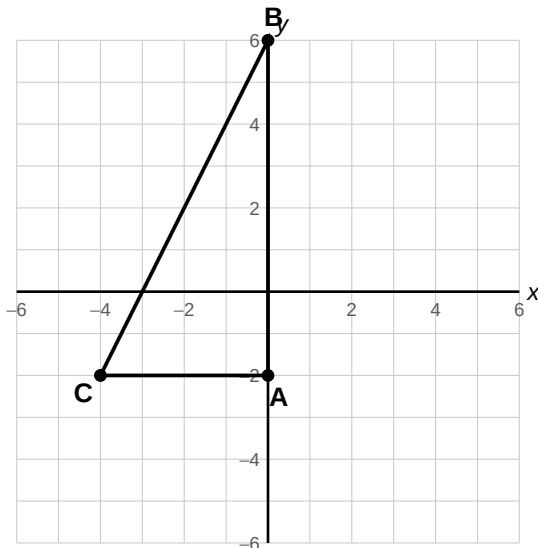


Dilate by a scale factor of $2/3$.

$A' =$ _____ $B' =$ _____

$C' =$ _____

3.

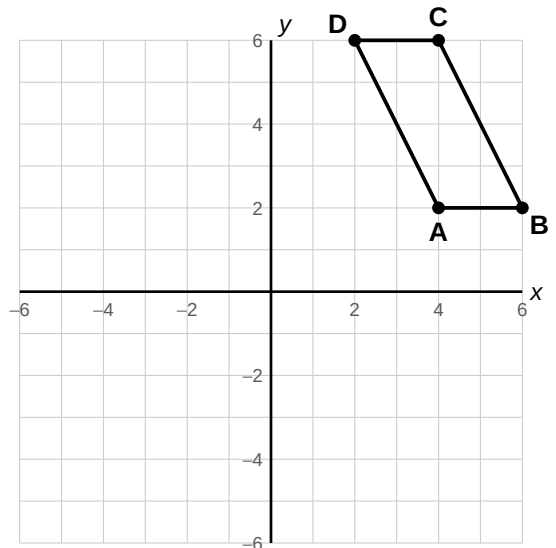


Dilate by a scale factor of $1/2$.

$A' =$ _____ $B' =$ _____

$C' =$ _____

4.



Dilate by a scale factor of $1/2$.

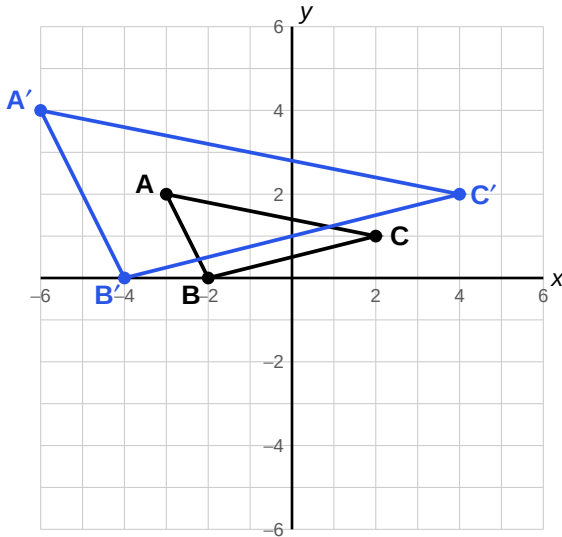
$A' =$ _____ $B' =$ _____

$C' =$ _____ $D' =$ _____

Find the scale factor

The origin is the center of each dilation. Compare a distance on the image with the same distance on the original.

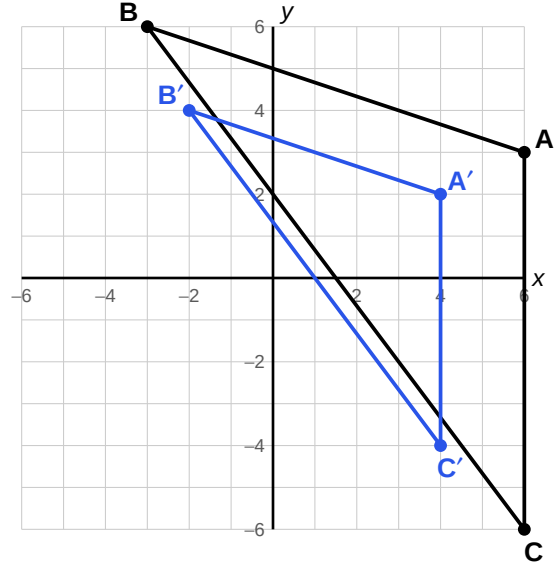
1.



What scale factor maps triangle ABC onto $A'B'C'$?

Scale factor = _____

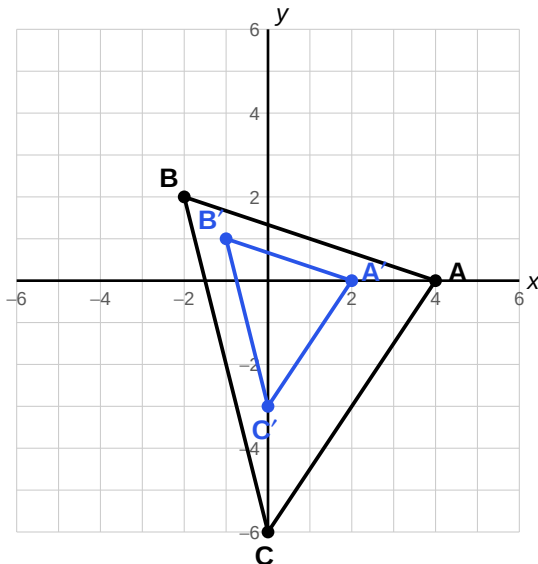
2.



What scale factor maps triangle ABC onto $A'B'C'$?

Scale factor = _____

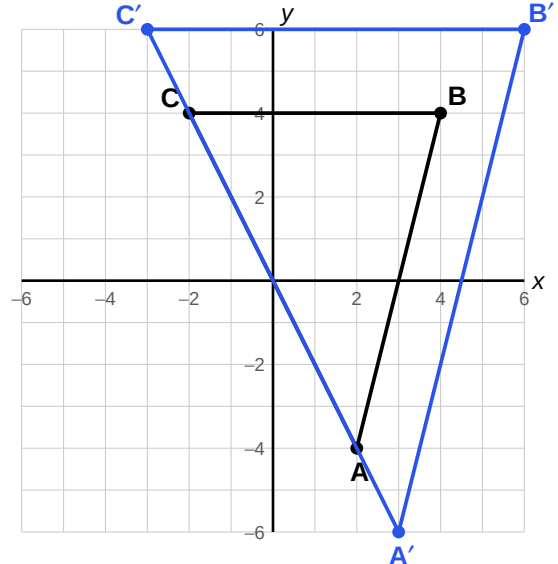
3.



What scale factor maps triangle ABC onto $A'B'C'$?

Scale factor = _____

4.



What scale factor maps triangle ABC onto $A'B'C'$?

Scale factor = _____

From coordinates

Multiply each coordinate by the scale factor. The center of the dilation is the origin.

1.

A figure with vertices $P(-2, 3)$, $Q(2, -5)$, $R(1, -2)$ and $S(-5, 6)$ is dilated by a scale factor of 2, centered at the origin. Write the coordinates of the image.

$P' =$ _____ $Q' =$ _____

$R' =$ _____ $S' =$ _____

2.

A figure with vertices $P(3, 4)$, $Q(-6, -5)$ and $R(0, -5)$ is dilated by a scale factor of 2, centered at the origin. Write the coordinates of the image.

$P' =$ _____ $Q' =$ _____

$R' =$ _____

3.

A figure with vertices $A(-2, 4)$, $B(-4, -6)$ and $C(6, -4)$ is dilated by a scale factor of $3/2$, centered at the origin. Write the coordinates of the image.

$A' =$ _____ $B' =$ _____

$C' =$ _____

4.

A figure with vertices $G(8, 12)$, $H(-12, 0)$ and $J(0, 12)$ is dilated by a scale factor of $1/4$, centered at the origin. Write the coordinates of the image.

$G' =$ _____ $H' =$ _____

$J' =$ _____