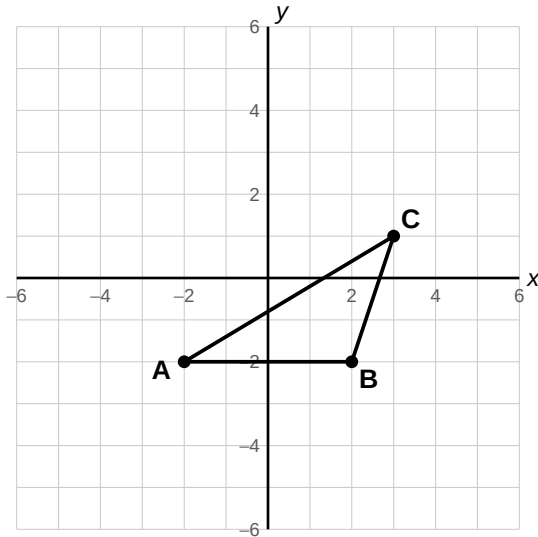


Enlargements

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

1.

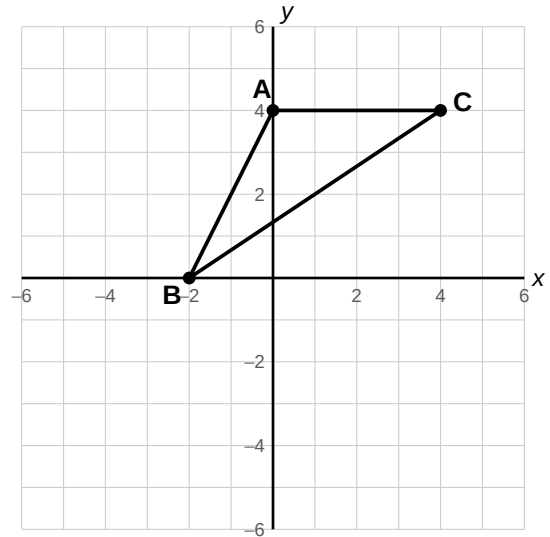


Dilate by a scale factor of 2.

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

$C' =$ _____

2.

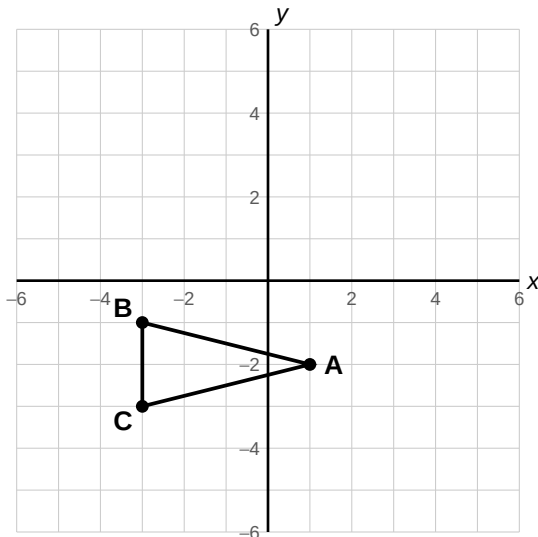


Dilate by a scale factor of $\frac{3}{2}$.

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

$C' =$ _____

3.

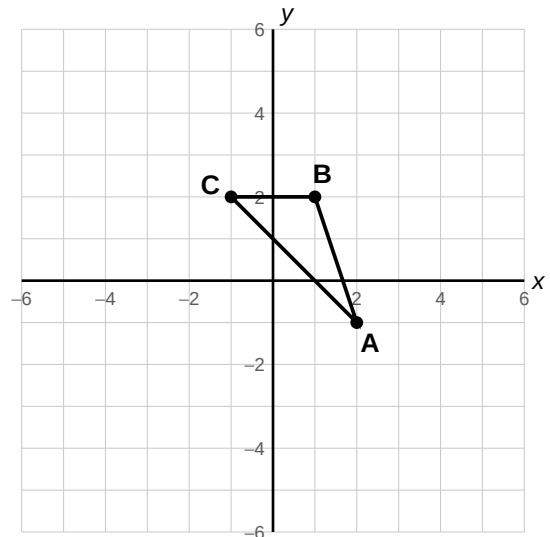


Dilate by a scale factor of 2.

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

$C' =$ _____

4.



Dilate by a scale factor of 2.

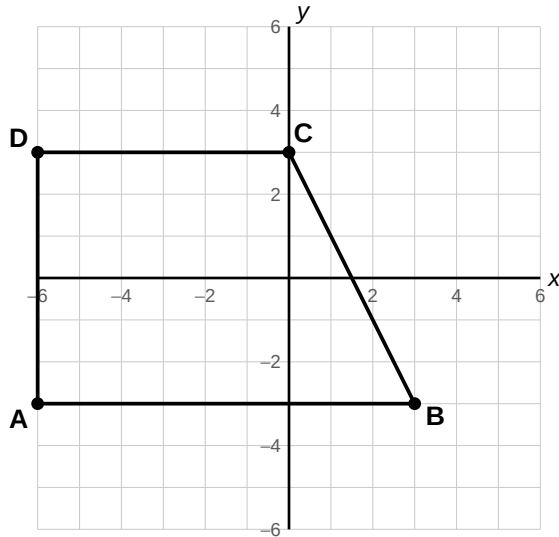
$A' =$ _____ $B' =$ _____

$C' =$ _____

Reductions

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

1.

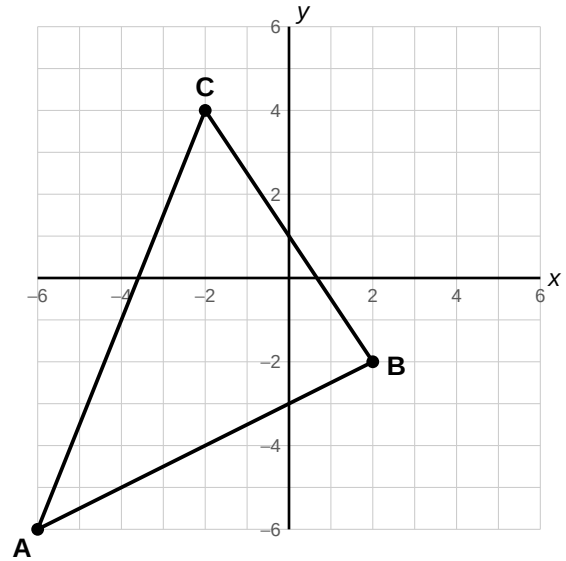


Dilate by a scale factor of $\frac{2}{3}$.

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

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

2.

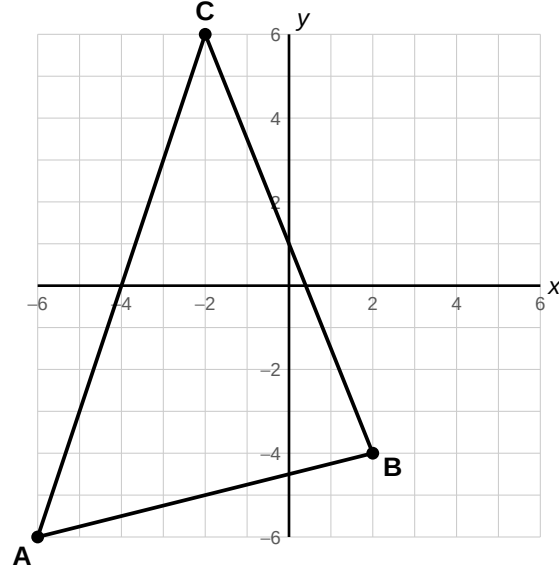


Dilate by a scale factor of $\frac{1}{2}$.

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

$C' =$ _____

3.

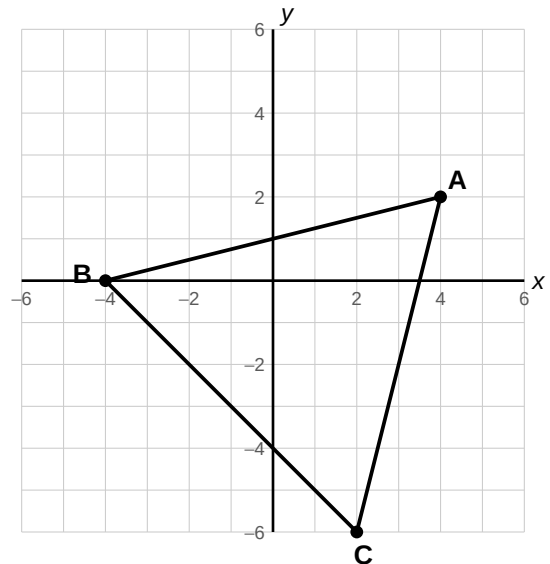


Dilate by a scale factor of $\frac{1}{2}$.

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

$C' =$ _____

4.



Dilate by a scale factor of $\frac{1}{2}$.

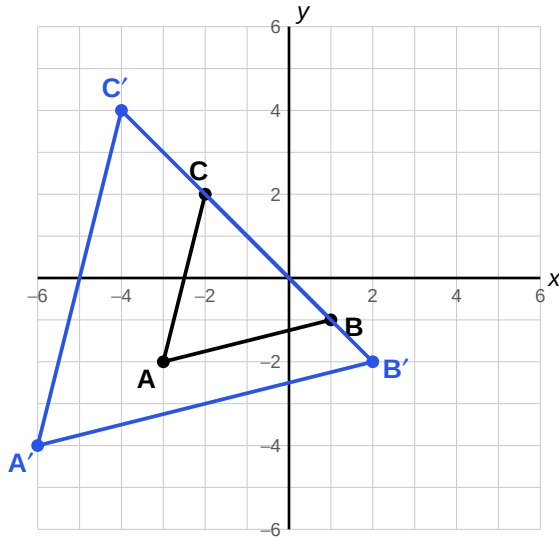
$A' =$ _____ $B' =$ _____

$C' =$ _____

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.

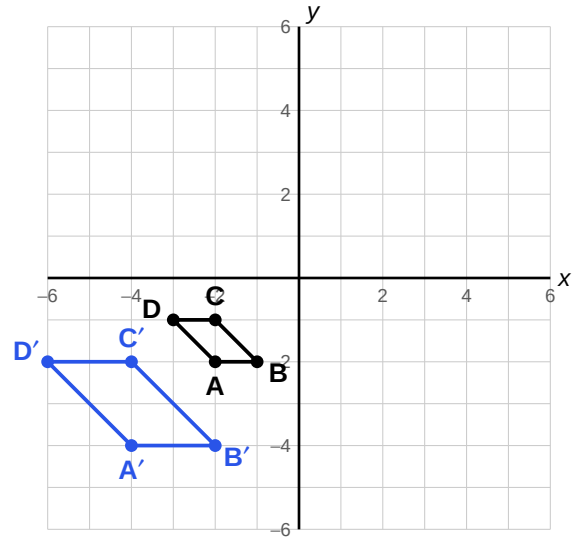
1.



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

Scale factor = _____

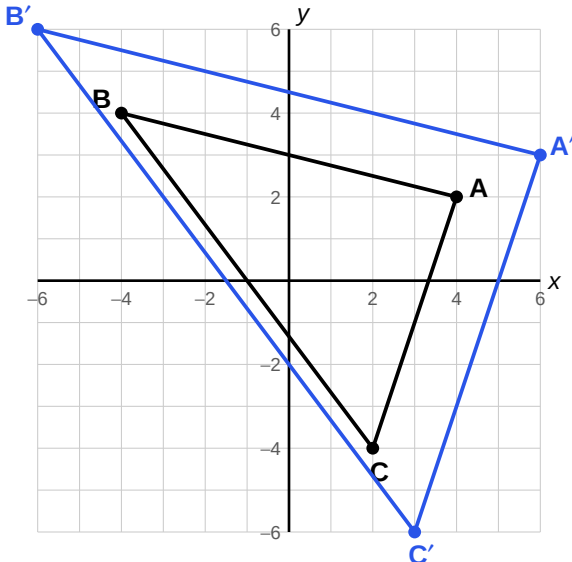
2.



What scale factor maps figure ABCD onto $A'B'C'D'$?

Scale factor = _____

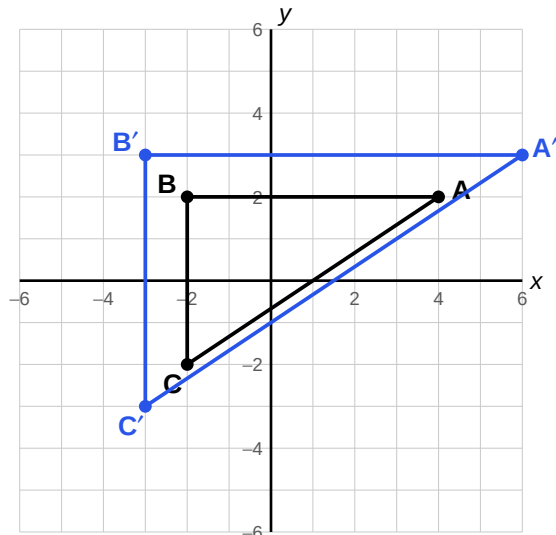
3.



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 D(5, 2), E(1, 3), F(5, -4) and G(-4, -2) is dilated by a scale factor of 2, centered at the origin. Write the coordinates of the image.

D' = _____ E' = _____

F' = _____ G' = _____

2.

A figure with vertices G(8, 2), H(-2, 8) and J(0, 4) is dilated by a scale factor of $\frac{3}{2}$, centered at the origin. Write the coordinates of the image.

G' = _____ H' = _____

J' = _____

3.

A figure with vertices W(-3, 0), X(-12, 0), Y(9, 6) and Z(-3, -6) is dilated by a scale factor of $\frac{1}{3}$, centered at the origin. Write the coordinates of the image.

W' = _____ X' = _____

Y' = _____ Z' = _____

4.

A figure with vertices P(3, 9), Q(-6, 6) and R(9, -3) is dilated by a scale factor of $\frac{1}{3}$, centered at the origin. Write the coordinates of the image.

P' = _____ Q' = _____

R' = _____