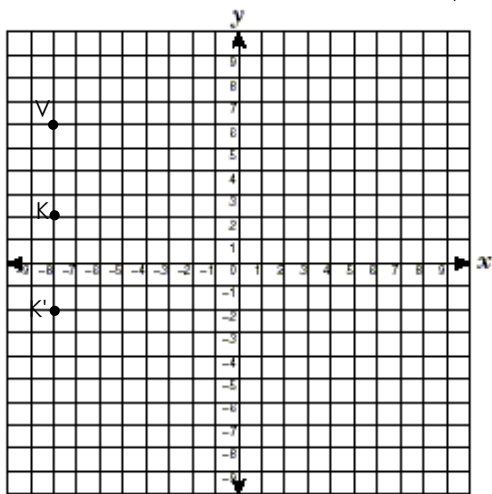


# Independent Practice

Find the scale factor of the dilation, centered at point V, that maps K onto K'



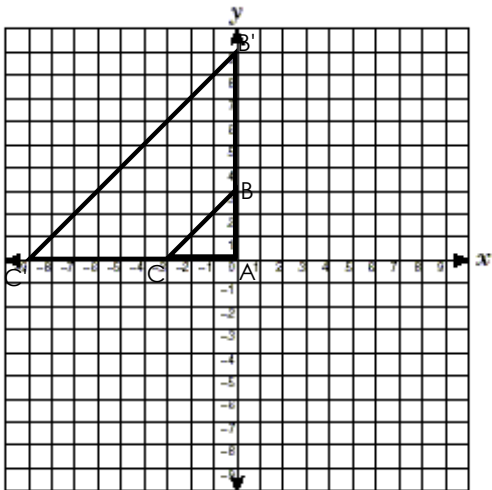
### Scale Factor

$$k = \frac{\text{Distance from Image}}{\text{Distance from Pre-Image}}$$

$$k = \frac{( 8 )}{( 4 )}$$

$$k = \underline{2}$$

Find the scale factor of the dilation, centered at point A, that maps  $\triangle ABC$  onto  $\triangle A'B'C'$



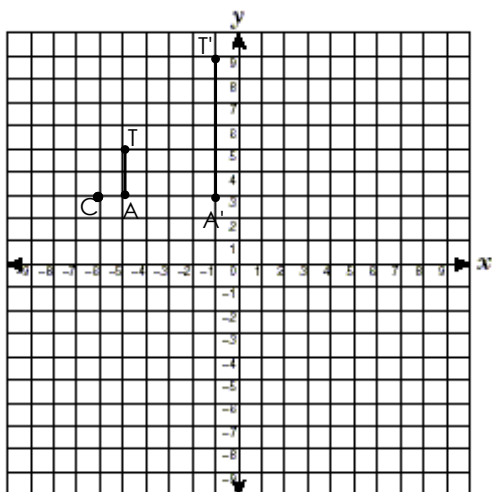
### Scale Factor

$$k = \frac{\text{Distance from Image}}{\text{Distance from Pre-Image}}$$

$$k = \frac{( 9 )}{( 3 )}$$

$$k = \underline{3}$$

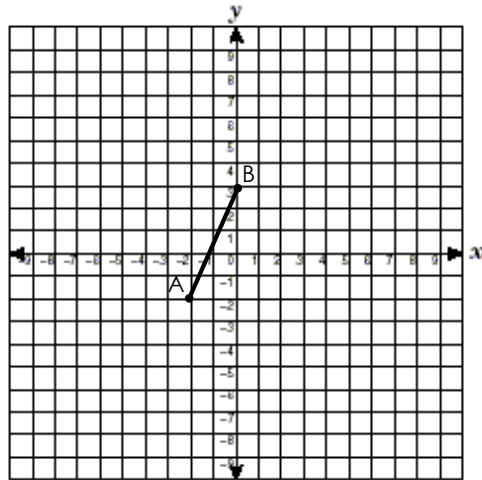
Find the scale factor of the dilation, centered at point C, that maps  $\overline{AT}$  on  $\overline{A'T'}$



### Scale Factor

$$k = \frac{( 6 )}{( 2 )}$$

$$k = \underline{3}$$



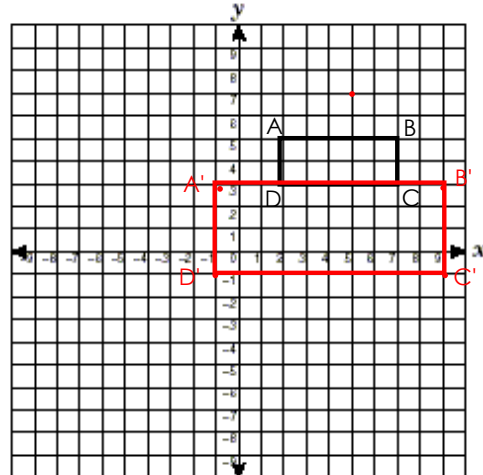
What are the coordinates of line  $\overline{A'B'}$  after a dilation centered at the origin with a scale factor of 3?

$$A(-2, -2) \longrightarrow A'(-6, -6)$$

$$B(0, 3) \longrightarrow B'(0, 9)$$

Is this a rigid transformation? Explain your answer.

No, the distance between points is not preserved



What are the coordinates of rectangle ABCD after a dilation centered at (5,7) with a scale factor of 2?

$$A(2, 5) \longrightarrow A'(-1, 3)$$

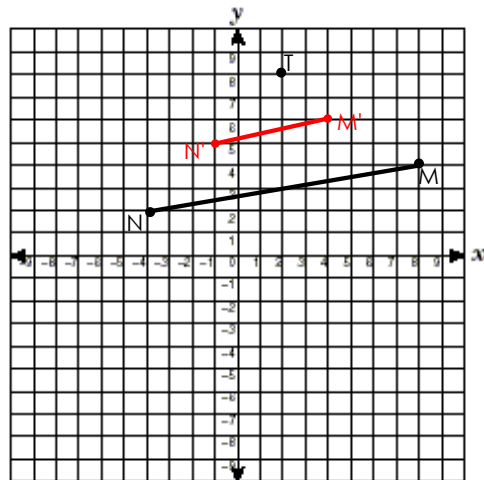
$$B(7, 5) \longrightarrow B'(9, 3)$$

$$C(7, 3) \longrightarrow C'(9, -1)$$

$$D(2, 3) \longrightarrow D'(-1, -1)$$

Is this a rigid transformation? Explain your answer.

No, the distance between points is not preserved



What are the coordinates of line  $\overline{N'M'}$  after a dilation centered at point T with a scale factor of  $\frac{1}{2}$ ?

$$M(8, 4) \longrightarrow M'(4, 8)$$

$$N(-4, 2) \longrightarrow N'(-1, 5)$$