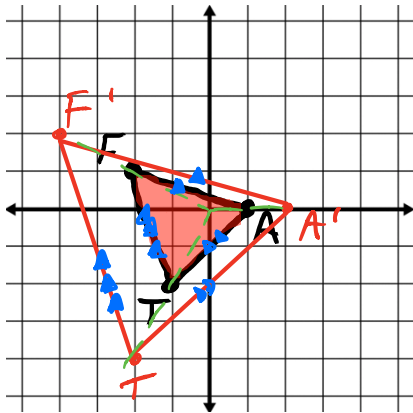


move points 2 times distance from origin

- 1) Dilate $\triangle FAT$ by scale factor of 2 about origin.



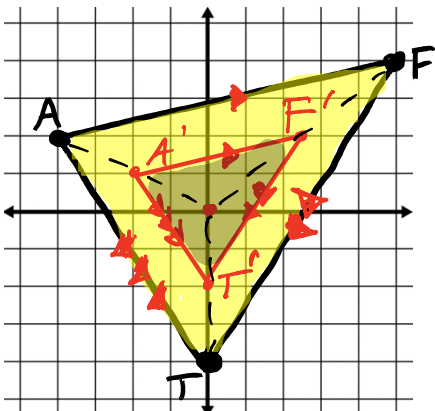
$$F(-2,1) \rightarrow F'(-4,2)$$

$$A(1,0) \rightarrow A'(2,0)$$

$$T(-1,-2) \rightarrow T'(-2,-4)$$

move points $\frac{1}{2}$ distance from origin

- 2) Dilate $\triangle FAT$ by scale factor of $\frac{1}{2}$ about origin.



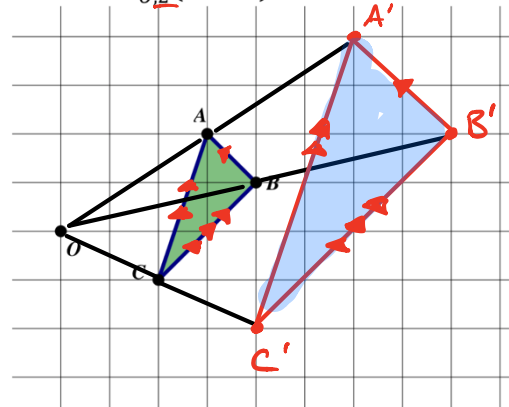
$$F(5,4) \rightarrow F'(\frac{5}{2}, 2)$$

$$A(-4,2) \rightarrow A'(-2, 1)$$

$$T(0,-4) \rightarrow T'(0, -2)$$

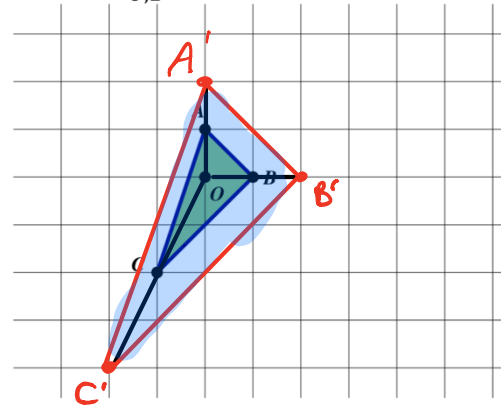
- 3) *move points 2 times distance from O*

$$D_{O,2}(\triangle ABC) = \triangle A'B'C'$$



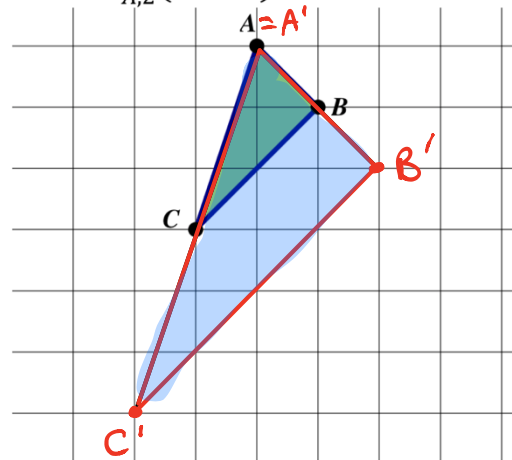
- 4) *move points 2 times distance from O*

$$D_{O,2}(\triangle ABC) = \triangle A'B'C'$$

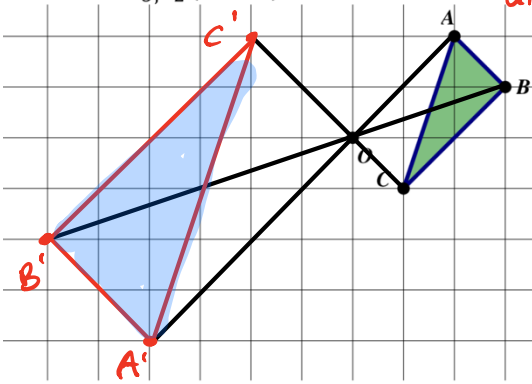


- 5) *move points 2 times distance from A*

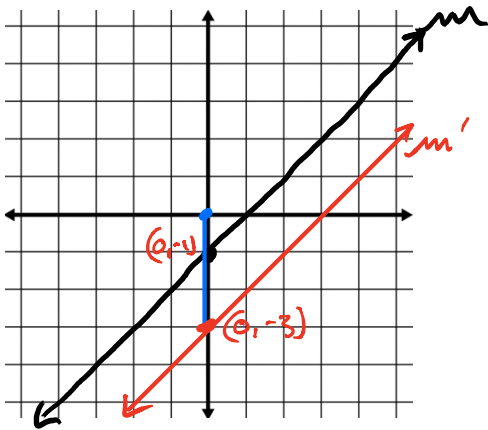
$$D_{A,2}(\triangle ABC) = \triangle A'B'C'$$



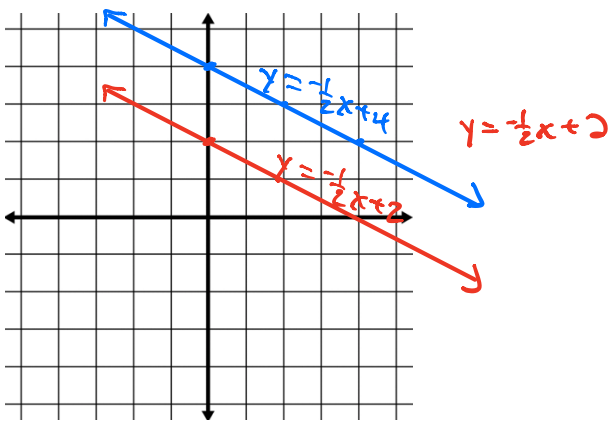
- 6) *move points 2 times distance from O in opposite direction*
 $D_{0,-2}(\Delta ABC) = \Delta A'B'C'$



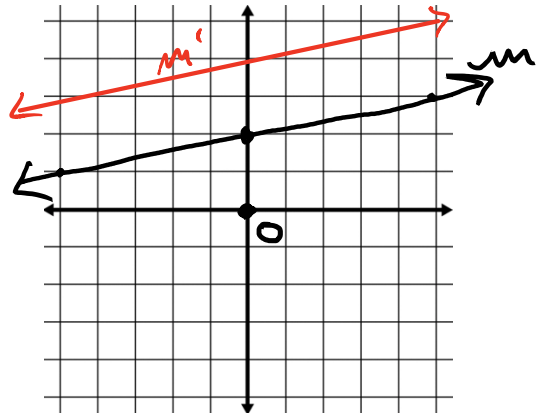
- move points 3 times distance from Origin*
 7) Dilate m about the origin by 3.



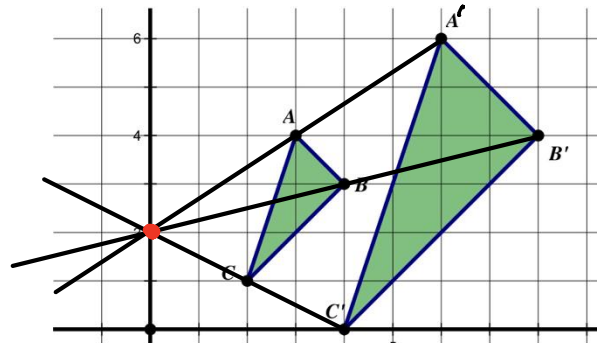
- move points 1/2 times distance from Origin*
 8) Dilate $y = \frac{-1}{2}x + 4$ about the origin by $\frac{1}{2}$



- move points 2 times distance from O*
 9) $D_{0,2}(m) = m'$



- 10) Determine the scale factor and center of dilation.



*Center = (0, 2)
 Scale factor = 2*

- 11) Determine if the dilation is an enlargement or reduction.

*Scale factor = 3:2 = 3/2
 Enlargement*

- 12) Determine if the dilation is an enlargement or reduction.

$D_{0, \frac{6}{11}}(\Delta ABC) = \Delta A'B'C'$
*sf = 6/11
 Reduction*