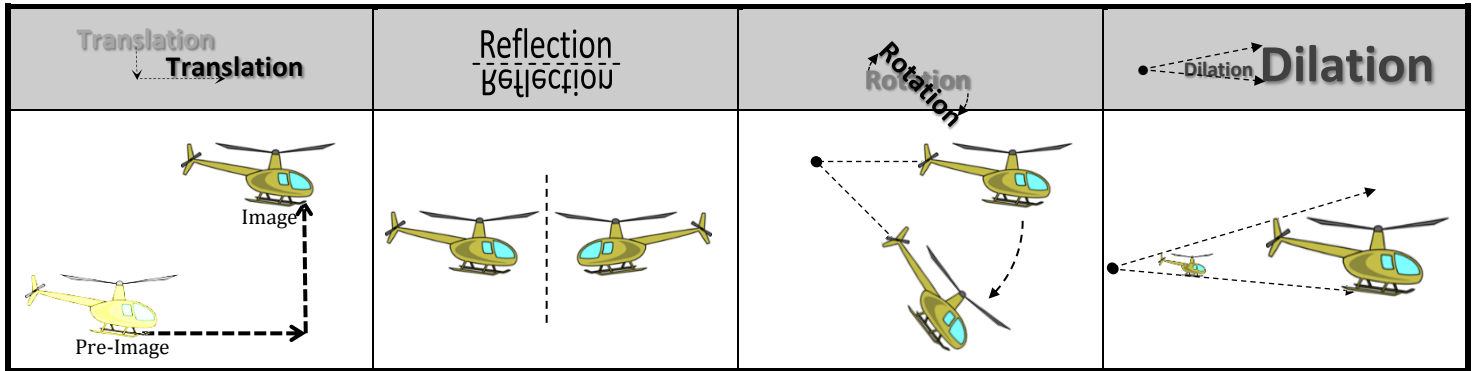


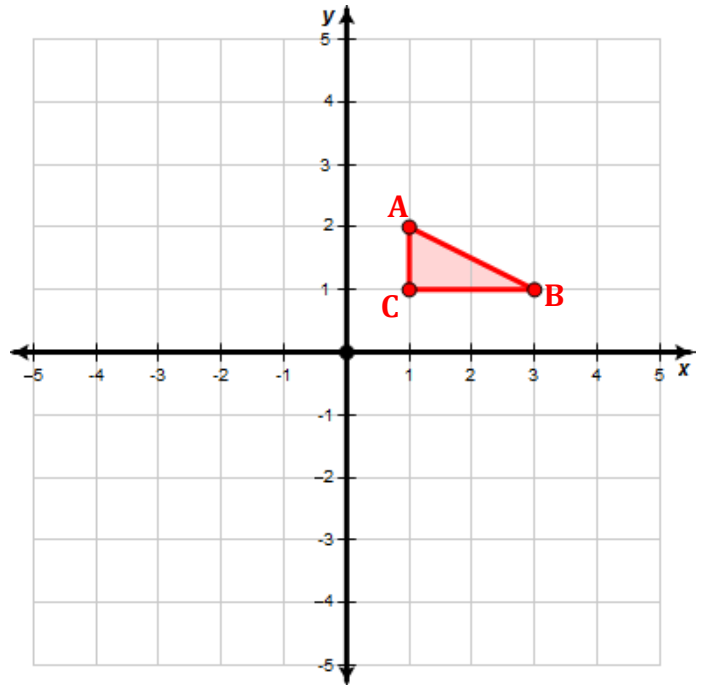
Transformation Types:



1. Consider the pre-image triangle with vertices $A(1,2)$, $B(3,1)$, and $C(1,1)$.

a. Rotate the pre-image triangle ABC 90° about the origin and label this triangle $A'B'C'$

b. Reflect the triangle $A'B'C'$ over the x -axis and label this triangle $A''B''C''$.

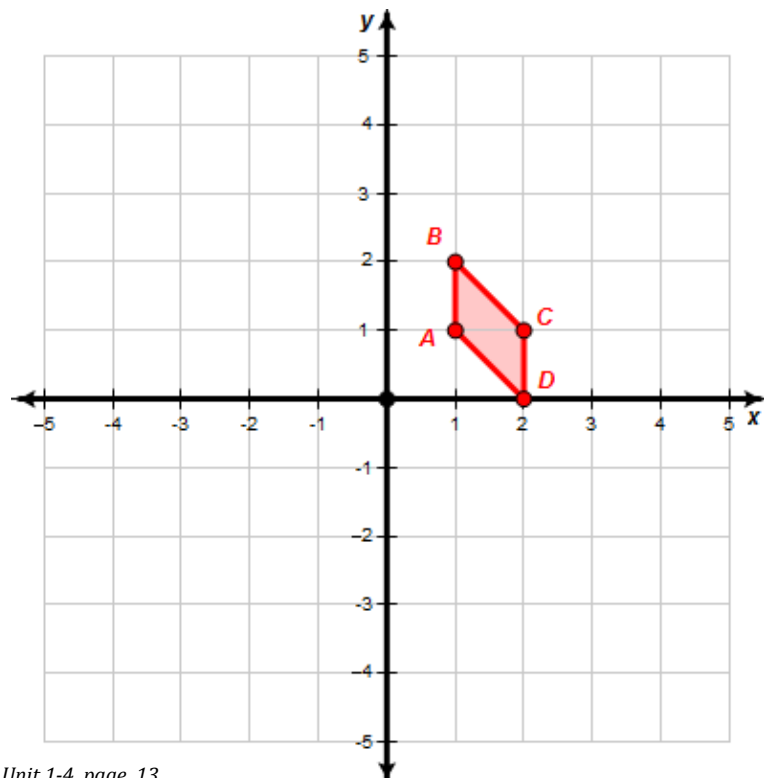


2. Consider the pre-image quadrilateral with vertices $A(1,1)$, $B(1,2)$, $C(2,1)$, and $D(2,0)$

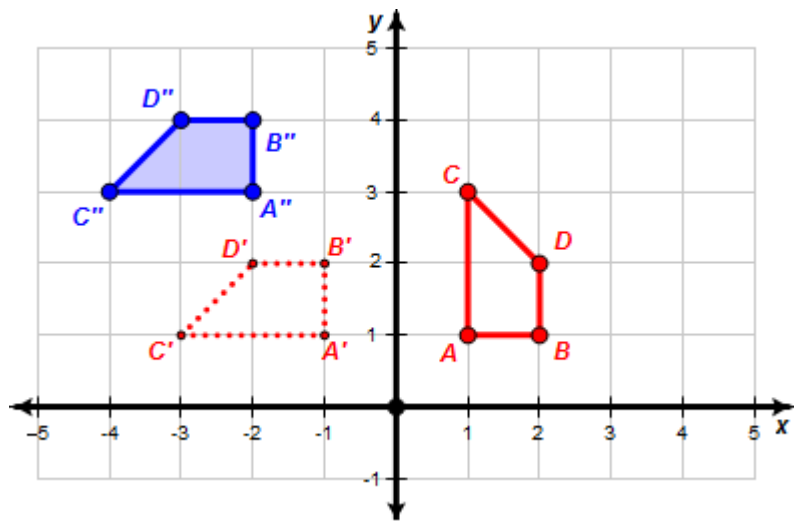
a. Dilate the quadrilateral by a factor of 2 from the origin and label the image quadrilateral $A'B'C'D'$.

b. Translate the quadrilateral image $A'B'C'D'$ down 5 units and left 1 unit. Label this new image $A''B''C''D''$.

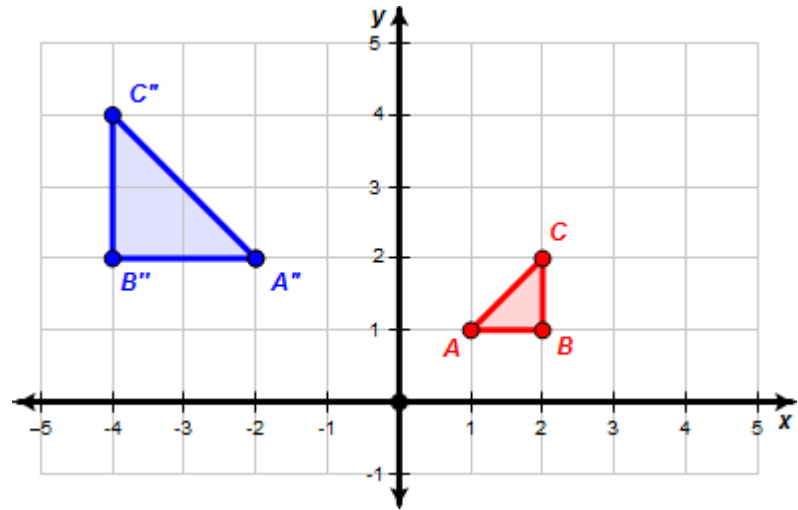
c. Reflect the quadrilateral image $A''B''C''D''$ over the y -axis and label this image $A'''B'''C'''D'''$



3. Describe two transformations that would map quadrilateral ABCD onto quadrilateral A''B''C''D''

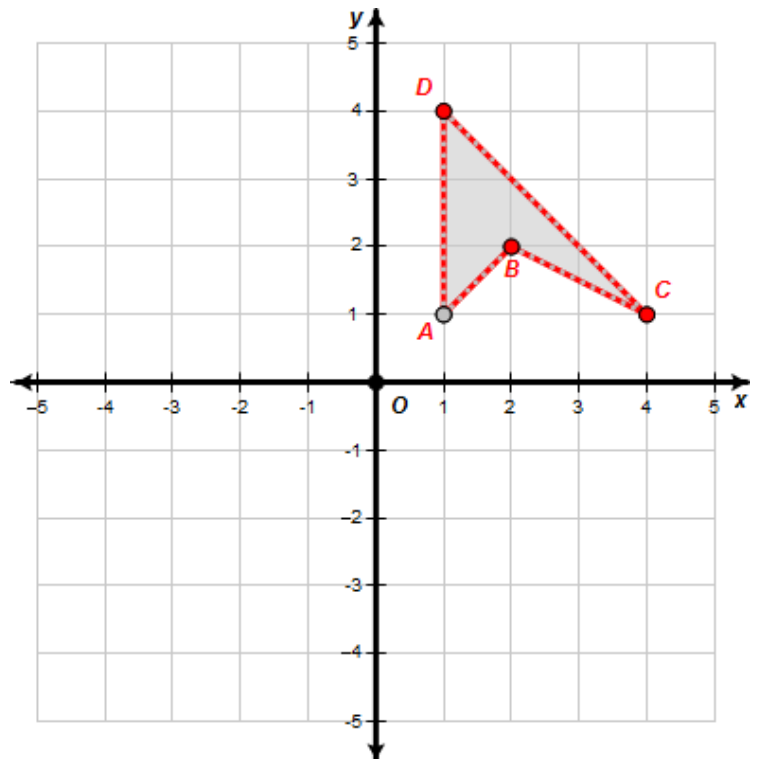


4. Describe two transformations that would map triangle ABC onto triangle A''B''C''



5. First reflect quadrilateral ABCD over the y-axis and label the triangle A'B'C'D'. Then, reflect quadrilateral A'B'C'D' over the x-axis and label this quadrilateral A''B''C''D''.

6. Anytime you use a double reflection, there should be a rotation about the intersection of the reflection lines that maps the pre-image onto the final image. In this example what is the amount of the rotation?



7. Given that pentagon $DGHIJ$ is first reflected over **line m** to create the image $D'G'H'I'J'$. Then, the image $D'G'H'I'J'$ is reflected over the **line l** to create the image $D''G''H''I''J''$. What is a different transformation that would also map $DGHIJ$ onto $D''G''H''I''J''$?

