

Questions for the reflecting over parallel and intersecting lines constructions

Reflecting over parallel lines:

1. Measure the distance between your parallel lines in cm.
2. Compare $\triangle ABC$ to $\triangle A''B''C''$ (the final image). What type of transformation occurred?
3. Measure the distance in cm from $\triangle ABC$ to $\triangle A''B''C''$. How far did it move?
4. Compare your answers from #1 and #3. What is the relationship between these distances?
5. Based on your answer to #4, if a figure is reflected over two parallel lines that are 8 cm apart, how far will the figure move?
6. What is the general relationship between the spacing of the parallel lines and the movement of the figure?

Reflecting over intersecting lines:

1. Measure the angle between your intersecting lines in degrees.
2. Compare $\triangle ABC$ to $\triangle A''B''C''$ (the final image). What type of transformation occurred?
3. Measure the angle from $\triangle ABC$ to $\triangle A''B''C''$. How far did it move?
4. Compare your answers from #1 and #3. What is the relationship between these angles?
5. Based on your answer to #4, if a figure rotates 120° after being reflected over two intersecting lines, what is the angle between the two intersecting lines?
6. What is the general relationship between the angle of the intersecting lines and the movement of the figure?