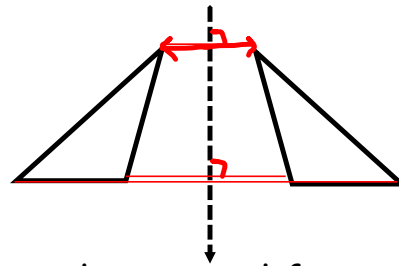


## 5.7 Reflections and Symmetry

Objective: Identify and use reflections and lines of symmetry.

A reflection is a transformation that creates a mirror image.

The original figure is reflected over a line that is called the line of reflection.



Properties of Reflections:

1. The reflected image is congruent to the original figure.
2. The orientation of the reflected image is reversed.
3. The line of reflection is the perpendicular bisector of the segments joining the corresponding points.

Checkpoint at the bottom of page 283.

A figure in a plane has a line of symmetry if the figure can be reflected onto itself by a reflection over the line.

Checkpoint at the bottom of page 285.