Transformations

Angle of Rotation: is a measurement of the amount, the angle, by which a figure is rotated counterclockwise about a fixed point

Center of Dilation: Point about which a figure is dilated.

Composition of Transformations: the application of a sequence of transformations to a figure.

Dilation: the shrinking or expanding of a figure, with each side shrinking or expanding proportionally about the center of dilation.

Glide Reflection: a composition of a "glide" (translation) and a reflection across a line parallel to the path of the translation.

Isometric Drawing: a method for representing a three-dimensional object in two dimensions.

Isometry: the quality of a transformation that preserves a figure's length. Translations, rotations, and reflections are isometric.

Reflection: a figure created when the original is "flipped" across a reflection axis to create a mirror image.

Rigid Motion: description of a transformation that produces a congruent figure, with sides of the same lengths and angles of the same measures.

Rotation: a transformation that turns a figure about a fixed point called the center of rotation.

Rotational Symmetry: a figure has rotational symmetry if it can be rotated about a central point through an angle of less than 360^{o} to perfectly overlap itself.

Scale Factor: the ratio of the lengths of corresponding sides in similar figures.

Similarity Transformations: the composition of a rigid motion and dilation.

Transformation: a change in the location, orientation, size, or other geometrical property of a figure.

Translation: a type of transformation in which a figure is moved to a new location, creating a new figure that is congruent with the original. In a translation, each point in a figure moves the same distance in the same direction. Also called a glide.