Transformations in Geometry

Today's Standard

HSG.CO.A4 - Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.

Cues	Notes
What is a translation?	A translation moves a shape in a straight line without changing its orientation.
How does a rotation differ from a reflection?	A rotation turns a shape around a fixed point, while a reflection flips a shape over a line.
What are the properties of a reflection?	A reflection creates a mirror image of a shape over a line, maintaining size and shape but changing orientation.
Define a rotation in geometric terms.	A rotation involves turning a shape around a fixed point by a certain angle.
What is the importance of transformations in geometry?	Transformations help in understanding the properties of geometric figures and solving complex problems.

Summary

Geometric transformations include translations, rotations, and reflections. Each type of transformation has specific properties and applications, which are essential for solving geometric problems and understanding the relationships between different shapes.