

Cornell Mote

Plane Transformations and Functions

Today's Standard

HSG.CO.A2 - Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).

Cues	Notes
What are transformations?	Transformations involve moving or changing shapes in the plane.
How do transformations function?	Transformations can be described as functions mapping points to new locations.
What is the difference between transformations that preserve distance and angle and those	Transformations like translations, rotations, and reflections preserve distance and angle. Stretches and compressions do not.
that do not?	Examples include architectural design, navigation systems, and digital animations.
Give examples of real-world applications of transformations.	

Summary

Transformations in geometry involve moving or changing shapes in the plane, often described as functions. Some transformations preserve distance and angle, while others do not. These concepts have various real-world applications.