

Parent Guide to the

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).

Real-World Applications for this Standard

Using geometry software to design architectural plans; Mapping out routes in navigation systems; Analyzing patterns in art and design; Simulating physical movements in video game design; Creating animations in digital media

Today I Learned

Today, I learned about how shapes can be moved or changed on a flat surface using special rules. These changes are called transformations, and they can help us understand lots of things in math and in the real world.

Common Stumbling Blocks

Sometimes, kids think that all changes to shapes keep them the same size and angle, but that's not true. Also, some kids think these changes only matter in math and not in real life, but they are used in many jobs and activities.

Quiz Me

- What is a transformation?
- Can a transformation change a shape's size?
- What is a function in math?
- How do we use transformations in real life?
- Can all transformations keep shapes the same?

Help Me

Transformations help us move or change shapes in many ways, like making maps or designing buildings. They are important because they show us how things can be different but still related.