



## Transformations of 2D Figures

### Today's Standard

8.G.A3 - Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.

Cues	Notes
Transformations	Transformations include translations, rotations, reflections, and dilations.
Rigid Motions	Rigid motions (translations, rotations, reflections) do not change the size of the figure.
Dilations	Dilations change the size but maintain the shape and proportions of the figure.
Coordinate Plane	Coordinate planes are used to describe transformations using points $(x, y)$ .
Real-world applications	Applications: graphics design, animation, architecture, navigation.

### Summary

Understanding geometric transformations on coordinate planes is crucial. Rigid motions preserve size while dilations change it. These concepts are widely applicable in various real-world fields.