Learning Targets

Rigid Transformations and Congruence

Lesson 1: Moving in the Plane

- I can describe how a figure moves and turns to get from one position to another.

Lesson 2: Naming the Moves

- I can identify corresponding points before and after a transformation.
- I know the difference between translations, rotations, and reflections.

Lesson 3: Grid Moves

- I can decide which type of transformations will work to move one figure to another.
- I can use grids to carry out transformations of figures.

Lesson 4: Making the Moves

- I can use the terms translation, rotation, and reflection to precisely describe transformations.

Lesson 5: Coordinate Moves

- I can apply transformations to points on a grid if I know their coordinates.

Lesson 6: Describing Transformations

- I can apply transformations to a polygon on a grid if I know the coordinates of its vertices.

Lesson 7: No Bending or Stretching

- I can describe the effects of a rigid transformation on the lengths and angles in a polygon.

Lesson 8: Rotation Patterns

- I can describe how to move one part of a figure to another using a rigid transformation.

Lesson 9: Moves in Parallel

- I can describe the effects of a rigid transformation on a pair of parallel lines.
- If I have a pair of vertical angles and know the angle measure of one of them, I can find the angle measure of the other.

Lesson 10: Composing Figures

- I can find missing side lengths or angle measures using properties of rigid transformations.

Lesson 11: What Is the Same?

- I can decide visually whether or not two figures are congruent.

Lesson 12: Congruent Polygons

- I can decide using rigid transformations whether or not two figures are congruent.

Lesson 13: Congruence

- I can use distances between points to decide if two figures are congruent.

Lesson 14: Alternate Interior Angles

- If I have two parallel lines cut by a transversal, I can identify alternate interior angles and use that to find missing angle measurements.

Lesson 15: Adding the Angles in a Triangle

- If I know two of the angle measures in a triangle, I can find the third angle measure.

Lesson 16: Parallel Lines and the Angles in a Triangle

- I can explain using pictures why the sum of the angles in any triangle is 180 degrees.

Lesson 17: Rotate and Tessellate

- I can repeatedly use rigid transformations to make interesting repeating patterns of figures.
- I can use properties of angle sums to reason about how figures will fit together.