



Topic C

Drawing Figures in the Coordinate Plane

5.G.1, 5.G.2

Focus Standard:	5.G.1	Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plan located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x -axis and x -coordinate, y -axis and y -coordinate).
	5.G.2	Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
Instructional Days:	5	
Coherence -Links from:	G4–M4	Angle Measure and Plane Figures
	G4–M5	Fraction Equivalence, Ordering, and Operations
-Links to:	G6–M4	Expressions and Equations

In Topic C, students draw figures in the coordinate plane by plotting points to create parallel, perpendicular, and intersecting lines. They reason about what points are needed to produce such lines and angles, and investigate the resultant points and their relationships. In preparation for Topic D, students recall Grade 4 concepts such as angles on a line, angles at a point, and vertical angles—all produced by plotting points and drawing figures on the coordinate plane (**5.G.1**). To conclude the topic, students draw symmetric figures using both angle size and distance from a given line of symmetry (**5.G.2**).

A Teaching Sequence Towards Mastery of Drawing Figures in the Coordinate Plane

**Objective 1: Construct parallel line segments on a rectangular grid.
(Lesson 13)**

**Objective 2: Construct parallel line segments, and analyze relationships of the coordinate pairs.
(Lesson 14)**

**Objective 3: Construct perpendicular line segments on a rectangular grid.
(Lesson 15)**

**Objective 4: Construct perpendicular line segments, and analyze relationships of the coordinate pairs.
(Lesson 16)**

**Objective 5: Draw symmetric figures using distance and angle measure from the line of symmetry.
(Lesson 17)**