Math 6+: Geometry
Lines, Angles, Polygons, and Coordinate Geometry

Coordinate Geometry

Students	Learning Continuum Statements:
Students:	**RIT 201-210:** • Counts to find the distance between points on the coordinate plane • Determines the coordinates of missing vertices of geometric figures in the first quadrant given the other vertices plotted on the coordinate plane • Determines the coordinates of points in all four quadrants of a coordinate graph • Determines the distance between two points with the same first or second coordinate
Students:	**RIT 211-220:** • Counts to find the distance between points on the coordinate plane • Determines the coordinates of missing vertices of geometric figures in the first quadrant given the coordinates of the other vertices • Determines the coordinates of missing vertices of geometric figures in the first quadrant given the other vertices plotted on the coordinate plane • Determines the coordinates of points in all four quadrants of a coordinate graph • Determines the distance between two points with the same first or second coordinate
Students:	**RIT 221-230:** • Determines the coordinates of missing vertices of geometric figures in the first quadrant given the coordinates of the other vertices • Determines the coordinates of missing vertices of geometric figures in the first quadrant given the other vertices plotted on the coordinate plane • Determines the coordinates of one endpoint of a line segment given the coordinates of the midpoint and the other endpoint • Determines the coordinates of points in all four quadrants of a coordinate graph • Determines the distance between two points with the same first or second coordinate
Students:	**RIT 231-240:** • Determines a side length of a polygon given the coordinates of the vertices with the same first or second coordinate • Determines the coordinates of missing vertices of geometric figures in the first quadrant given the coordinates of the other vertices • Determines the coordinates of one endpoint of a line segment given the coordinates of the midpoint and the other endpoint • Determines the coordinates of points in all four quadrants of a coordinate graph • Determines the coordinates of the midpoint of a line segment • Determines the distance between two points with the same first or second coordinate • Identifies the type of quadrilateral given the coordinates of the vertices

Students:	**RIT 241-250:** • Determines the area of a triangle given the coordinates of the vertices • Determines the coordinates of one endpoint of a line segment given the coordinates of the midpoint and the other endpoint • Determines the coordinates of the midpoint of a line segment • Determines the distance between two points on the coordinate plane • Determines the perimeter or area of a rectangle given vertices with the same first or second coordinate
Students:	**RIT 251-260:** • Determines the area of a triangle given vertices with the same first or second coordinate • Determines the coordinates of missing vertices of geometric figures in all four quadrants given the coordinates of the other vertices • Determines the coordinates of one endpoint of a line segment given the coordinates of the midpoint and the other endpoint • Determines the coordinates of the midpoint of a line segment • Determines the distance between two points on the coordinate plane • Determines the slope of a line perpendicular to a given line • Identifies collinear points • Uses slopes to identify perpendicular lines • Writes the equation of a line parallel to a given line • Writes the equation of a line parallel to a line that passes through a given point • Writes the equation of a line perpendicular to a line that passes through a given point
Students:	**RIT 261-270:** • Determines the area of a rectangle given the coordinates of the vertices • Determines the coordinates of the midpoint of a line segment • Determines the distance between two points on the coordinate plane • Determines the perimeter of a rectangle given the coordinates of the vertices • Determines the perimeter of a triangle given the coordinates of the vertices • Determines the ratio between two pieces of a line segment given a point on the line segment that is not the midpoint • Determines the slope of a line perpendicular to a given line • Determines the slope of a line perpendicular to a line that passes through two given points • Identifies collinear points • Writes the equation of a line perpendicular to a given line • Writes the equation of a line perpendicular to a line that passes through a given point • Writes the equation of the perpendicular bisector of a line segment
Students:	**RIT 271-280:** • Determines the area of a rectangle given the coordinates of the vertices • Identifies collinear points • Writes the equation of a line perpendicular to a line that passes through a given point • Writes the equation of the perpendicular bisector of a line segment