

Math DesCartes: Geometry and Spatial Sense

Skills: Transformations, Symmetry, Representation Systems

Students:	DesCartes Skills: (Highlight the skills related to your chosen standard/concept)
	<p>RIT 251-260:</p> <ul style="list-style-type: none"> • Uses picture representations to identify corresponding parts of symmetric plane figures • Uses picture representations to identify symmetry of plane figures with respect to a point or line • Determines the midpoint of a line on a coordinate grid • Determines an endpoint of a line segment on a coordinate grid, given the midpoint and the other endpoint
	<p>RIT 241-250:</p> <ul style="list-style-type: none"> • Determines the new coordinates of a transformed geometric figure • Determines the distance between two points • Determines the midpoint of a line on a coordinate grid • Determines the figure when plotting ordered pairs • Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines) • Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)
	<p>RIT 231-240:</p> <ul style="list-style-type: none"> • Identifies geometric transformations (dilations) • Graphs ordered pairs in all quadrants • Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines) • Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)
	<p>RIT 221-230:</p> <ul style="list-style-type: none"> • Predicts changes necessary to create symmetry in basic plane shapes • Identifies geometric transformations (rotations) • Identifies geometric transformations (translations) • Identifies geometric transformations (reflections) • Determines coordinates of geometric figures in the first quadrant • Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks) • Graphs ordered pairs in all quadrants • Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines) • Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)
	<p>RIT 211-220:</p> <ul style="list-style-type: none"> • Classifies plane figures by the number of lines of symmetry • Identifies geometric transformations (rotations) • Identifies geometric transformations (translations)

	<ul style="list-style-type: none"> • Identifies geometric transformations (reflections) • Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system • Locates the origin on a coordinate grid
	<p>RIT 201-210:</p> <ul style="list-style-type: none"> • Classifies plane figures by the number of lines of symmetry • Defines transformations • Graphs ordered pairs in the first quadrant • Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph) • Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system • Locates the origin on a coordinate grid
	<p>RIT 191-200:</p> <ul style="list-style-type: none"> • Identifies plane figures with line symmetry • Identifies the number of lines of symmetry in plane figures • Identifies transformations of plane figures (reflections/flips) • Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)
	<p>RIT 181-190:</p> <ul style="list-style-type: none"> • Identifies plane figures with line symmetry • Identifies transformations of plane figures (rotations/turns) • Identifies transformations of plane figures (translations/slides) • Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)
	<p>RIT 171-180:</p> <ul style="list-style-type: none"> • <i>No Skills Listed</i>
	<p>RIT 161-170:</p> <ul style="list-style-type: none"> • <i>No Skills Listed</i>
	<p>Below RT 161:</p> <ul style="list-style-type: none"> • Predicts the shape after unfolding a figure

Math DesCartes: Geometry and Spatial Sense
Skills: Transformations, Symmetry, Representation Systems

Lesson Title:

Standard/Concept for All:

Introduction: (Get Attention; Connect to Prior Knowledge)

For Students Ready for a Challenge:

Lesson/Activity:

Resources:

Means of Assessment:

For Most Students:

Lesson/Activity:

Resources:

Means of Assessment:

For Students Needing Extra Support:

Lesson/Activity:

Resources:

Means of Assessment:

Closure/Summary for All: