

DesCartes: A Continuum of Learning®

Mathematics

Goal: Geometry

RIT Score Range: 201 - 210 Statements Last Updated: Mar 10, 2014

Skills and Concepts to Enhance (73% Probability*) 191 - 200	Skills and Concepts to Develop (50% Probability*) 201 - 210	Skills and Concepts to Introduce (27% Probability*) 211 - 220
Geometric Measurement and Relationships	Geometric Measurement and Relationships	Geometric Measurement and Relationships
Selects and uses the appropriate type and size of unit in customary system (length)	Uses the appropriate unit of measure for lengthKnows the approximate size of a yard	Uses the appropriate unit of measure for lengthKnows the approximate size of a millimeter
Determines the perimeter of a figure where all sides are labeled	Measures length to the nearest centimeter	Selects and uses the appropriate type and size of unit in metric system
Determines the perimeter of a figure where some sides are labeled	Knows the approximate size of a pound	(mass)
• Solves simple problems involving the perimeter of squares, rectangles,	Knows the approximate size of a gram	Solves simple problems involving capacity
or triangles • Estimates the area of rectangles using square units	Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents	• Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents
• Identifies lines	Determines the perimeter of a figure where some sides are labeled	Measures angles using a protractor
Identifies parallel lines	Describes the change in area of a triangle when 1 dimension of an	Determines the perimeter of a figure using non-standard units
Uses models to compare angles relative to right angles	object is altered (metric units)	Solves problems involving the perimeter of squares, rectangles, or triangles
Identifies right angles	Estimates the area of rectangles using square units	Finds the perimeter of a polygon using a formula
Identifies corners (vertices) of cubes	Determines the area of irregular shapes with partial square units	Describes the change in perimeter when dimensions of an object are
Identifies the number of faces on rectangular prisms	Identifies situations where it is appropriate to calculate area	altered
Identifies and names a cylinder	Estimates and finds volume of a figure using cubic units	Determines the diameter, given the radius, and vice versa
Identifies and names a sphereSorts 2-D shapes and objects according to their attributes	 Uses basic indirect methods to estimate measurements (grids for area of irregular figures) 	Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)
• Creates a new shape by combining different shapes, or identifies the	Identifies parallel lines	Determines the area of irregular shapes with partial square units
different shapes that were used to make the original shape	Uses models to compare angles relative to right angles	Estimates and finds volume of a figure using cubic units
 Explores maps and relates them to measurements of real distances, using the scale 	Identifies and names a parallelogram Identifies and names a trapezoid	Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)
	Identifies and names a hexagon	Identifies rays
	Classifies polygons by number of sides	Identifies properties of angles
	Classifies polygons by sides and angles	Identifies acute angles
	• Identifies corners (vertices) of cubes	Identifies obtuse angles
	Classifies cubes by their properties (e.g., edges with equal lengths,	Identifies and names a trapezoid
	faces with equal areas and congruent shapes, right angle corners)	Identifies and names a rhombus
	Identifies a cube from a net	Identifies and names a quadrilateral
	Identifies and names a cylinder	Classifies polygons by type of angle
		Identifies corners (vertices) of cubes
		Identifies the net which makes a cube-like (open box) figure
		Identifies the number of edges on rectangular prisms
		Predicts and verifies the effects of combining or subdividing basic shapes
		Determines an appropriate scale for representing a distance on a map
Congruence, Similarity, Right Triangles, & Trig	Congruence, Similarity, Right Triangles, & Trig	Congruence, Similarity, Right Triangles, & Trig
Identifies congruent figures	Identifies congruent polygons and their corresponding sides and angles	Identifies similar and congruent triangles
Identifies congruent polygons and their corresponding sides and angles	Classifies plane figures by the number of lines of symmetry	Uses similar figures to construct ratios and solve for a missing side

Explanatory Notes

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* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into appropriate RIT ranges. Blank cells indicate data are limited or unavailable for this range or document version.

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Congruence, Similarity, Right Triangles, & Trig	Congruence, Similarity, Right Triangles, & Trig	Congruence, Similarity, Right Triangles, & Trig
• Identifies plane figures with line symmetry		Identifies geometric transformations (rotations)
 Identifies the number of lines of symmetry in plane figures 		Identifies geometric transformations (translations)
• Identifies transformations of plane figures (reflections/flips)		
New Vocabulary: face, intersect, large, parallel, vertical line	New Vocabulary: cubic centimeter, cubic unit, edge, larger, parallel line, regular polygon, trapezoid	New Vocabulary: acute angle, congruent angle, cord, dilation, obtuse angle, straight angle, transformation
New Signs and Symbols: \$ dollar sign, ft feet, in. inch, m meter/metre, yd yard		
	New Signs and Symbols: cm centimeter/centimetre, ° degrees, g gram	New Signs and Symbols: ∠ angle, angle marker (arc), ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up, mm millimeter/millimetre, • point, right angle marker, : used with time

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