

Mathematics

Key for “Province”:

Bold type – BC Big Ideas

Regular type – BC content (K-9)

K-9 Curricular Competencies used throughout all topics: reasoning and analyzing, understanding and solving, communicating and representing

Topics	Gr	North American Division	Province:
Numbers and Operations	8	<i>Rational/Irrational Numbers:</i> 8.NO.1 Informally understand and use number sense for irrational numbers (8.NS.1,2)	(8) Number represents, describes, and compares the quantities of ratios, rates, and percents: numerical proportional reasoning. (8) Computational fluency and flexibility extend to operations with fractions: operations with fractions.
Operations and Algebraic Thinking	8	<i>Expressions/Equations/Inequalities:</i> 8.OAT.1 Work with radicals and integer exponents (8.E.E.1,2,3,4)	(8) Computational fluency and flexibility extend to operations with fractions: two-step equations with integer coefficients, constants, and solutions.
		<i>Expressions/Equations/Inequalities, cont:</i> 28.OAT.2 Understand and graph the connections between proportional relationships, lines, slope, and linear equations (8.EE.5,6)	(8) Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations: discrete linear relations.
		<i>Expressions/Equations/Inequalities, cont:</i> 8.OAT.3 Analyze and solve linear equations and pairs of simultaneous linear equations (8.EE.7,8)	(8) Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations: discrete linear relations, two-step equations with integer coefficients, constants, and solutions.
		<i>Functions:</i> 8.OAT.4 Define, evaluate, compare, and use functions to model relationships between quantities (8.F.1,2,3,4,5)	(8) Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations: discrete linear relations, expressions, and two-step equations.
Measurement	8	<i>Mathematical Precision:</i> 8.M.1 Use appropriate significant digits in calculations	(8) Computational fluency and flexibility extend to operations with fractions.
Geometry	8	<i>Figures:</i> 8.GEO.1 Understand congruence and similarity using various mediums including geometric software (8.G.1,2,3,4,5)	(8) The relationship between surface area and volume of 3D objects can be used to describe, measure, and compare spatial relationships: construction, views, and nets of 3D objects.
		<i>Figures, cont:</i> 8.GEO.2 Understand and apply the Pythagorean Theorem (8.G.6,7,8)	(8) The relationship between surface area and volume of 3D objects can be used to describe, measure, and compare spatial relationships: Pythagorean theorem.
		<i>Volume:</i> 8.GEO.3 Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres (8.G.9)	(8) The relationship between surface area and volume of 3D objects can be used to describe, measure, and compare spatial relationships: surface area and volume, and two-step equations.
Data Analysis, Statistics, and Probability	8	<i>Statistics and Probability:</i> 8.DSP.1 Investigate patterns of association in bivariate data (8.SP.1,2,3,4)	(8) Analyzing data by determining averages is one way to make sense of large data sets and enables us to compare and interpret: central tendency, and theoretical probability with two independent events.