2023-2024 Draft PEI Mathematics Curriculum - Grade 9

The following outcomes are accurate. The curriculum guide for this course is still relevant and includes important information for teachers. Teachers are reminded to reference this document for the outcomes when using the curriculum guide.

Outcomes	Curriculum Document Page
9.N1 (FL) Demonstrate an understanding of powers with integral bases (excluding base 0) and whole number exponents by: representing repeated multiplication using powers; using patterns to show that a power with an exponent of zero is equal to one; solving problems involving powers.	Curriculum Guide p. 20
9.N2 (FL) Demonstrate an understanding of operations on powers with integral bases (excluding base 0) and whole number exponents.	Curriculum Guide p. 22
9.N3 (FL) Demonstrate an understanding of rational numbers by: comparing and ordering rational numbers; solving problems that involve arithmetic operations on rational numbers.	Curriculum Guide p. 24
9.N4 (FL) Explain and apply the order of operations, including exponents, with and without technology.	Curriculum Guide p. 26
8.N1 Demonstrate an understanding of perfect square and square root, concretely, pictorially and symbolically (limited to whole numbers).	Gr 8. Curriculum Guide p. 20
9.N5 Determine the square root of positive rational numbers that are perfect squares.	Curriculum Guide p. 28
9.N6 Determine an approximate square root of positive rational numbers that are non-perfect squares.	Curriculum Guide p. 30
9.PR1 Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.	Curriculum Guide p. 34
9.PR3 (FL) Model and solve problems using linear equations of the form: $ax = b; \frac{x}{a} = b, a \neq 0;\ ax + b = c;\ \frac{x}{a} + b = c, a \neq 0;\ ax = b + cx;\ a(x + b) = c;\ ax + b = cx + d;\ a(bx + c) = d(ex + f);\ \frac{a}{x} = b, x \neq 0$ **where a-f are rational numbers.**	Curriculum Guide p. 38
9.PR4 Explain and illustrate strategies to solve single variable linear inequalities with rational coefficients within a problem-solving context.	Curriculum Guide p. 40
9.PR5 Demonstrate an understanding of polynomials (limited to polynomials of degree less than or equal to 2).	Curriculum Guide p. 42
9.PR6 (FL) Model, record and explain the operations of addition and subtraction of polynomial expressions, concretely, pictorially and symbolically (limited to polynomials of degree less than or equal to 2).	Curriculum Guide p. 44
9.PR7 (FL) Model, record and explain the operations of multiplication and division of polynomial expressions (limited to polynomials of degree less than or equal to 2) by monomials, concretely, pictorially and symbolically.	Curriculum Guide p. 46
8.SS1 (FL) Develop and apply the Pythagorean theorem to solve problems.	Gr. 8 Curriculum Guide p. 42
9.SS2 Determine the surface area of composite 3-D objects to solve problems.	Curriculum Guide p. 52
9.SS3 Demonstrate an understanding of similarity of polygons.	Curriculum Guide p. 54
9.SS4 Draw and interpret scale diagrams of 2D shapes.	Curriculum Guide p. 56