

TIPS4RM Targeted Implementation
and Planning Supports for
Revised Mathematics

Grade 7

Grade 7: Content and Reporting Targets

Mathematical Process Expectations across all strands and terms: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, Communicating.

Term 1 – Content Targets	Term 2 – Content Targets	Term 3 – Content Targets
Number Sense and Numeration <ul style="list-style-type: none"> integers (Unit 2) order of operations (Unit 4) Measurement <ul style="list-style-type: none"> composite figures (Unit 4) area of a trapezoid (Unit 4) Patterning and Algebra <ul style="list-style-type: none"> describing patterns (Unit 2) Data Management and Probability <ul style="list-style-type: none"> collect, organize and analyse data (Unit 3) 	Number Sense and Numeration <ul style="list-style-type: none"> multiples and factors (Unit 7) fractions (Unit 7) introduction to proportional relationships (percents) (Unit 7) squares and square roots (Unit 4) order of operations (Units 4 and 5) Measurement <ul style="list-style-type: none"> surface area of right prisms (Unit 4) application of area measurements (Unit 4) Geometry and Spatial Sense <ul style="list-style-type: none"> geometry of lines and angles (Unit 6) Patterning and Algebra <ul style="list-style-type: none"> solving equations (Unit 5) using variables (Unit 5) 	Number Sense and Numeration <ul style="list-style-type: none"> proportional relationships (ratios, rates) (Unit 9) order of operations (Unit 10) Measurement <ul style="list-style-type: none"> volume of right prisms (Unit 10) Geometry and Spatial Sense <ul style="list-style-type: none"> similar and congruent triangles (Unit 8) transformations (Unit 8) Patterning and Algebra <ul style="list-style-type: none"> modelling and describing proportional relationships (Unit 7) Data Management and Probability <ul style="list-style-type: none"> probability (Unit 7)
Rationale		
Connections between: <ul style="list-style-type: none"> order of operations/composite figures and trapezoids; patterning with integers/developing understanding of integer addition and subtraction; developing trapezoid area formula/areas of composite figures; data collection, organization, and analysis/investigations with central tendency; measurement concepts/use of variables; describing patterns using words/development of understanding of variables in a relationship. Leading to: <ul style="list-style-type: none"> examining volume of right prisms (Term 3) with trapezoidal bases; determining surface area of right prisms; (Term 2) connecting the general term of a pattern to solving equations and substitution into algebraic expressions; (Term 2) connecting measurement formulas to solving equations; (Term 2) describing patterns when modelling and analysing proportional relationships; (Term 3) connecting volume and the use of exponents; (Term 3) connecting area to multiples, factors, squares, and square roots; (Term 2) investigations in measurement and geometry; (Terms 2 and 3) multiplication and division of integers. (Grade 8) 	Connections between: <ul style="list-style-type: none"> multiples, factors, squares, and square roots introduced through applications of area, perimeter, and volume; fraction skills/area; fractions, decimals, and percents; solving equations by inspection/estimating and using mental math; conversion of metric measures/mental math skills; solving equations through systematic trial/applying patterning skills; surface area/measurement applications; order of operations/surface area of prisms/variables and equations; lines and angles/right prisms. Leading to: <ul style="list-style-type: none"> ratio and rate as examples of proportional relationships; (Term 3) investigating congruency based on angle and line characteristics; (Term 3) relationships of surface area and volume of right prisms; (Term 3) connections between modelling real-life relationships and proportional relationships; using estimation to judge reasonableness of a solution; metric conversions for measures of volume; (Term 3) solving equations using a “balance” model; (Grade 8) surface area of cylinders; (Grade 8) multiplication and division of fractions. (Grade 8) 	Connections between: <ul style="list-style-type: none"> integers, whole numbers, and decimals; order of operations/estimation and mental math skills/volume of prisms; trapezoids/volume of right prisms; congruency/similarity/transformations; exponents/area and volume measurements; volume/factors; probability/fractions and percents; tiling/transformational geometry/ congruent figures; describing trends in proportional relationships/analysing data; trends in graphs/patterning. Leading to: <ul style="list-style-type: none"> using general formula for volume of a prism to determine volume of a cylinder; (Grade 8) order of operations with exponents; (Grade 8) multiplication and division of integers; (Grade 8) proportional reasoning with rates; (Grade 8) complementary events and probability that an event will not occur. (Grade 8)

Grade 7: Number Sense and Numeration

Term 1	Term 2	Term 3
<p>Mathematical Process Expectations across all strands and terms: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, Communicating.</p>		
<p><u>Integers</u> 7m8 – represent, compare, and order numbers, including integers; 7m9 – demonstrate an understanding of addition and subtraction of ... integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers; 7m13 – identify and compare integers found in real-life contexts (e.g., -10°C is much colder than $+5^{\circ}\text{C}$); 7m14 – represent and order integers, using a variety of tools (e.g., two-colour counters, virtual manipulatives, number lines); 7m26 – add and subtract integers, using a variety of tools (e.g., two-colour counters, virtual manipulatives, number lines).</p>	<p><u>Multiples and Factors</u> 7m12 – generate multiples and factors, using a variety of tools and strategies (e.g., identify multiples on a hundreds chart; create rectangles on a geoboard). <u>Fractions</u> 7m11 – represent, compare, and order decimals to hundredths and fractions, using a variety of tools (e.g., number lines, Cuisenaire rods, base ten materials, calculators); 7m15 – select and justify the most appropriate representation of a quantity (i.e., fraction, decimal, percent) for a given context (e.g., “I would use a decimal for recording the length or mass of an object, and a fraction for part of an hour.”); 7m18 – divide whole numbers by simple fractions and by decimal numbers to hundredths, using concrete materials; 7m19 – use a variety of mental strategies to solve problems involving the addition and subtraction of fractions and decimals; 7m20 – solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m22 – use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution; 7m24 – add and subtract fractions with simple like and unlike denominators, using a variety of tools (e.g., fraction circles, Cuisenaire rods, drawings, calculators) and algorithms; 7m25 – demonstrate, using concrete materials, the relationship between the repeated addition of fractions and the multiplication of that fraction by a whole number. <u>Introduction to Proportional Relationships</u> 7m10 – demonstrate an understanding of proportional relationships using percent, ratio, and rate; 7m27 – determine, through investigation, the relationships among fractions, decimals, percents, and ratios; 7m28 – solve problems that involve determining whole number percents, using a variety of tools (e.g., base ten materials, paper and pencil, calculators); 7m15 – select and justify the most appropriate representation of a quantity (i.e., fraction, decimal, percent) for a given context (e.g., “I would use a decimal for recording the length or mass of an object, and a fraction for part of an hour.”); 7m22 – use estimation when solving problems involving operations with ... percents, to help judge the reasonableness of a solution. <u>Squares and Square Roots</u> 7m16 – represent perfect squares and square roots, using a variety of tools (e.g., geoboards, connecting cubes, grid paper).</p>	<p><u>Proportional Relationships</u> 7m29 – demonstrate an understanding of rate as a comparison, or ratio, of two measurements with different units (e.g., speed is a rate that compares distance to time and that can be expressed as kilometres per hour); 7m30 – solve problems involving the calculation of unit rates. <u>Order of Operations</u> 7m21 – solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m23 – evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations. <u>Address in Measurement Term 3</u> 7m17 – explain the relationship between exponential notation and the measurement of area and volume (Sample problem: Explain why area is expressed in square units [units^2] and volume is expressed in cubic units [units^3]).</p>

Grade 7: Measurement

Term 1	Term 2	Term 3
Mathematical Process Expectations across all strands and terms: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, Communicating.		
<p><u>Composite Figures</u> 7m36 – solve problems that require conversion between metric units of area (i.e., square centimetres, square metres); 7m39 – estimate and calculate the area of composite two-dimensional shapes by decomposing into shapes with known area relationships (e.g., rectangle, parallelogram, triangle);</p> <p><u>Area of a Trapezoid</u> 7m32 – determine the relationships among units and measurable attributes, including the area of a trapezoid ...; 7m37 – determine, through investigation using a variety of tools (e.g., concrete materials, dynamic geometry software) and strategies, the relationship for calculating the area of a trapezoid, and generalize to develop the formula [i.e., $\text{Area} = (\text{sum of lengths of parallel sides} \times \text{height}) \div 2$]; 7m38 – solve problems involving the estimation and calculation of the area of a trapezoid.</p> <p><u>From Number Sense</u> 7m17 – explain the relationship between exponential notation and the measurement of area ... 7m20 – solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m21 – solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m22 – use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution; 7m23 – evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations.</p>	<p><u>Surface Area of Right Prisms</u> 7m41 – determine, through investigation using a variety of tools (e.g., nets, concrete materials, dynamic geometry software, Polydrons), the surface area of right prisms; 7m42 – solve problems that involve the surface area and volume of right prisms and that require conversion between metric measures of capacity and volume (i.e., millilitres and cubic centimetres).</p> <p><u>From Number Sense</u> 7m17 – explain the relationship between exponential notation and the measurement of area ... 7m20 – solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m21 – solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m22 – use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution; 7m23 – evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations.</p> <p><u>Application of Area Measurements</u> 7m31 – report on research into real-life applications of area measurements; 7m33 – research and report on real-life applications of area measurements (e.g., building a skateboard; painting a room).</p>	<p><u>Volume of Right Prisms</u> 7m32 – determine the relationships among units and measurable attributes, including ... the volume of a right prism; 7m34 – sketch different polygonal prisms that share the same volume; 7m35 – solve problems that require conversion between metric units of measure (e.g., millimetres and centimetres, grams and kilograms, millilitres and litres); 7m40 – determine, through investigation using a variety of tools and strategies (e.g., decomposing right prisms; stacking congruent layers of concrete materials to form a right prism), the relationship between the height, the area of the base, and the volume of right prisms with simple polygonal bases (e.g., parallelograms, trapezoids), and generalize to develop the formula (i.e., $\text{Volume} = \text{area of base} \times \text{height}$); 7m42 – solve problems that involve the surface area and volume of right prisms and that require conversion between metric measures of capacity and volume (i.e., millilitres and cubic centimetres).</p> <p><u>From Number Sense</u> 7m17 – explain the relationship between exponential notation and the measurement of ... volume (Sample problem: Explain why area is expressed in square units [units^2] and volume is expressed in cubic units [units^3]); 7m20 – solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m21 – solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms); 7m22 – use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution; 7m23 – evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations.</p>

Grade 7: Geometry and Spatial Sense

Mathematical Process Expectations across all strands and terms: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, Communicating.

Term 1	Term 2	Term 3
	<p><u>Geometry of Lines and Angles</u></p> <p>7m43 – construct related lines, and classify triangles, quadrilaterals, and prisms;</p> <p>7m46 – construct related lines (i.e., parallel; perpendicular; intersecting at 30°, 45°, and 60°), using angle properties and a variety of tools (e.g., compass and straight edge, protractor, dynamic geometry software) and strategies (e.g., paper folding);</p> <p>7m47 – sort and classify triangles and quadrilaterals by geometric properties related to symmetry, angles, and sides, through investigation using a variety of tools (e.g., geoboard, dynamic geometry software) and strategies (e.g., using charts, using Venn diagrams);</p> <p>7m48 – construct angle bisectors and perpendicular bisectors, using a variety of tools (e.g., Mira, dynamic geometry software, compass) and strategies (e.g., paper folding), and represent equal angles and equal lengths using mathematical notation;</p> <p>7m49 – investigate, using concrete materials, the angles between the faces of a prism, and identify right prisms.</p>	<p><u>Transformations</u></p> <p>7m45 – describe location in the four quadrants of a coordinate system, dilate two-dimensional shapes, and apply transformations to create and analyse designs;</p> <p>7m54 – plot points using all four quadrants of the Cartesian coordinate plane;</p> <p>7m55 – identify, perform, and describe dilatations (i.e., enlargements and reductions), through investigation using a variety of tools (e.g., dynamic geometry software, geoboard, pattern blocks, grid paper);</p> <p>7m56 – create and analyse designs involving translations, reflections, dilatations, and/or simple rotations of two-dimensional shapes, using a variety of tools (e.g., concrete materials, Mira, drawings, dynamic geometry software) and strategies (e.g., paper folding);</p> <p>7m57 – determine, through investigation using a variety of tools (e.g., pattern blocks, Polydrons, grid paper, tiling software, dynamic geometry software, concrete materials), polygons or combinations of polygons that tile a plane, and describe the transformation(s) involved.</p> <p><u>Similar and Congruent Triangles</u></p> <p>7m44 – develop an understanding of similarity, and distinguish similarity and congruence;</p> <p>7m50 – identify, through investigation, the minimum side and angle information (i.e., side-side-side; side-angle-side; angle-side-angle) needed to describe a unique triangle (e.g., “I can draw many triangles if I’m only told the length of one side, but there’s only one triangle I can draw if you tell me the lengths of all three sides.”);</p> <p>7m51 – determine, through investigation using a variety of tools (e.g., dynamic geometry software, concrete materials, geoboard), relationships among area, perimeter, corresponding side lengths, and corresponding angles of congruent shapes;</p> <p>7m52 – demonstrate an understanding that enlarging or reducing two-dimensional shapes creates similar shapes;</p> <p>7m53 – distinguish between and compare similar shapes and congruent shapes, using a variety of tools (e.g., pattern blocks, grid paper, dynamic geometry software) and strategies (e.g., by showing that dilatations create similar shapes and that translations, rotations, and reflections generate congruent shapes).</p>

Grade 7: Patterning and Algebra

Mathematical Process Expectations across all strands and terms: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, Communicating.

Term 1	Term 2	Term 3
<p><u>Describing Patterns</u></p> <p>7m58 – represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions;</p> <p>7m60 – represent linear growing patterns, using a variety of tools (e.g., concrete materials, paper and pencil, calculators, spreadsheets) and strategies (e.g., make a table of values using the term number and the term; plot the coordinates on a graph; write a pattern rule using words);</p> <p>7m61 – make predictions about linear growing patterns, through investigation with concrete materials;</p> <p>7m62 – develop and represent the general term of a linear growing pattern, using algebraic expressions involving one operation (e.g., the general term for the sequence 4, 5, 6, 7, ... can be written algebraically as $n + 3$, where n represents the term number; the general term for the sequence 5, 10, 15, 20, ... can be written algebraically as $5n$, where n represents the term number);</p> <p>7m63 – compare pattern rules that generate a pattern by adding or subtracting a constant, or multiplying or dividing by a constant, to get the next term (e.g., for 1, 3, 5, 7, 9, ..., the pattern rule is “start at 1 and add 2 to each term to get the next term”) with pattern rules that use the term number to describe the general term (e.g., for 1, 3, 5, 7, 9, ..., the pattern rule is “double the term number and subtract 1,” which can be written algebraically as $2 \times n - 1$).</p>	<p><u>Solving Equations</u></p> <p>7m59 – model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check;</p> <p>7m66 – translate phrases describing simple mathematical relationships into algebraic expressions (e.g., one more than three times a number can be written algebraically as $1 + 3x$ or $3x + 1$), using concrete materials (e.g., algebra tiles, pattern blocks, counters);</p> <p>7m67 – evaluate algebraic expressions by substituting natural numbers for the variables;</p> <p>7m68 – make connections between evaluating algebraic expressions and determining the term in a pattern using the general term (e.g., for 3, 5, 7, 9, ..., the general term is the algebraic expression $2n + 1$; evaluating this expression when $n = 12$ tells you that the 12th term is $2(12) + 1$, which equals 25);</p> <p>7m69 – solve linear equations of the form $ax = c$ or $c = ax$ and $ax + b = c$ or variations such as $b + ax = c$ and $c = bx + a$ (where a, b, and c are natural numbers) by modelling with concrete materials, by inspection, or by guess and check, with and without the aid of a calculator (e.g., “I solved $x + 7 = 15$ by using guess and check. First I tried 6 for x. Since I knew that 6 plus 7 equals 13 and 13, is less than 15, then I knew that x must be greater than 6.”).</p> <p><u>From Number Sense</u></p> <p>7m20 – solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);</p> <p>7m21 – solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);</p> <p>7m22 – use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution;</p> <p>7m23 – evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations.</p>	<p><u>Modelling and Describing Proportional Relationships</u></p> <p>7m59 – model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check;</p> <p>7m64 – model real-life relationships involving constant rates where the initial condition starts at 0 (e.g., speed, heart rate, billing rate), through investigation using tables of values and graphs;</p> <p>7m65 – model real-life relationships involving constant rates (e.g., speed, heart rate, billing rate), using algebraic equations with variables to represent the changing quantities in the relationship (e.g., the equation $p = 4t$ represents the relationship between the total number of people that can be seated (p) and the number of tables (t), given that each table can seat 4 people [4 people per table is the constant rate]).</p>

Grade 7: Data Management and Probability

Mathematical Process Expectations across all strands and terms: Problem Solving, Reasoning and Proving, Reflecting, Selecting Tools and Computational Strategies, Connecting, Representing, Communicating.

Term 1	Term 2	Term 3
<p><u>Collect, Organize, and Analyse Data</u> 7m70 – collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs; 7m71 – make and evaluate convincing arguments, based on the analysis of data; 7m73 – collect data by conducting a survey or an experiment to do with themselves, their environment, issues in their school or community, or content from another subject and record observations or measurements; 7m74 – collect and organize categorical, discrete, or continuous primary data and secondary data (e.g., electronic data from websites such as E-Stat or Census At Schools) and display the data in charts, tables, and graphs (including relative frequency tables and circle graphs) that have appropriate titles, labels (e.g., appropriate units marked on the axes), and scales (e.g., with appropriate increments) that suit the range and distribution of the data, using a variety of tools (e.g., graph paper, spreadsheets, dynamic statistical software); 7m75 – select an appropriate type of graph to represent a set of data, graph the data using technology, and justify the choice of graph (i.e., from types of graphs already studied); 7m76 – distinguish between a census and a sample from a population; 7m77 – identify bias in data collection methods; 7m78 – read, interpret, and draw conclusions from primary data (e.g., survey results, measurements, observations) and from secondary data (e.g., temperature data or community data in the newspaper, data from the Internet about populations) presented in charts, tables, and graphs (including relative frequency tables and circle graphs); 7m79 – identify, through investigation, graphs that present data in misleading ways (e.g., line graphs that exaggerate change by starting the vertical axis at a point greater than zero); 7m80 – determine, through investigation, the effect on a measure of central tendency (i.e., mean, median, and mode) of adding or removing a value or values (e.g., changing the value of an outlier may have a significant effect on the mean but no effect on the median); 7m81 – identify and describe trends, based on the distribution of the data presented in tables and graphs, using informal language; 7m82 – make inferences and convincing arguments that are based on the analysis of charts, tables, and graphs.</p>		<p><u>Probability</u> 7m72 – compare experimental probabilities with the theoretical probability of an outcome involving two independent events; 7m83 – research and report on real-world applications of probabilities expressed in fraction, decimal, and percent form (e.g., lotteries, batting averages, weather forecasts, elections); 7m84 – make predictions about a population when given a probability; 7m85 – represent in a variety of ways (e.g., tree diagrams, tables, models, systematic lists) all the possible outcomes of a probability experiment involving two independent events (i.e., one event does not affect the other event), and determine the theoretical probability of a specific outcome involving two independent events; 7m86 – perform a simple probability experiment involving two independent events, and compare the experimental probability with the theoretical probability of a specific outcome.</p>

Grade 7 Year Outline – Planning Tool

P Number of Planned Lessons
J Number of Jazz Days
T Total Lesson Time

Term	Unit	Cluster of Curriculum Expectations	Overall Expectations	P	J	T
1	1	Celebrating 7	7m43 construct related lines, and classify triangles, quadrilaterals, and prisms; 7m70 collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs.	4 (4 included)	1	5
	2	Describing Patterns and on to Integers	7m8 represent, compare, and order numbers, including integers; 7m9 demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers; 7m58 represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions.	14 (14 included)	3	17
	3	Collect, Organize, and Analyse Data	7m70 collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs; 7m71 make and evaluate convincing arguments, based on the analysis of data.	13 (13 included)	3	16
	4	Composite Figures and Area of a Trapezoid	7m31 report on research into real-life applications of area measurements; 7m32 determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism.	11 (8 included)	3	14
		Summative Assessment		6	2	8
		Sub-totals		48 (39 included)	12	60
2		Surface Area of Prisms and Application of Area Measurement	7m31 report on research into real-life applications of area measurements; 7m32 determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism.	12 (8 included)	2	14
	5	Solving Equations	7m58 represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions; 7m59 model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check.	6 (6 included)		6

Term	Unit	Cluster of Curriculum Expectations	Overall Expectations	P	J	T
2	6	Geometry	7m43 construct related lines, and classify triangles, quadrilaterals, and prisms.	10 (7 included)	1	11
	7	Fractions and Decimals	7m8 represent, compare, and order numbers, including integers; 7m9 demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers; 7m10 demonstrate an understanding of proportional relationships using percent, ratio, and rate.	23 (9 included)	2	25
		Summative Assessment		4		4
		Sub-totals		55 (30 included)	5	60
3		Probability	7m72 compare experimental probabilities with the theoretical probability of an outcome involving two independent events.	8 (0 included)	2	10
	8	Similarity, Congruency, and Transformations	7m44 develop an understanding of similarity, and distinguish similarity and congruence; 7m45 describe location in the four quadrants of a coordinate system, dilate two-dimensional shapes, and apply transformations to create and analyse designs.	17 (8 included)	3	20
	9	Ratio and Rate	7m10 demonstrate an understanding of proportional relationships using percent, ratio, and rate.	7 (0 included)	2	9
	10	Volume of Right Prisms	7m9 demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers; 7m32 determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism.	10 (8 included)	3	13
		Summative Assessment		6	2	8
		Sub-totals		48 (16 included)	12	60
Total days				151 (85 provided)	29 days	180 days

The number of planned lessons represents the lessons that could be planned ahead based on the range of student readiness, interests, and learning profiles that can be expected in a class. The extra time available for "instructional jazz" can be taken a few minutes at a time within a pre-planned lesson, or taken a whole class at a time, as informed by teachers' observations of student needs.

The reference numbers are intended to indicate which lessons are planned to precede and follow each other. Actual day numbers for particular lessons and separations between terms will need to be adjusted by teachers.