

Grade 7 JUMP Math Correlation to the Manitoba Curriculum

NOTES:

JUMP Math strands are represented by:

- N Number
- PR Patterns and Relations
- SS Shape and Space
- SP Statistics and Probability

Number				
General Learning Outcome				
Develop number sense.				
Specific Learning Outcomes		JUMP Math Lessons		
7.N.1	Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9, or 10, and why a number cannot be divided by 0. [C, R]	Part	Unit	Lessons
		1	1	N7-2 to 6
7.N.2	Demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals to solve problems (for more than 1-digit divisors or 2-digit multipliers, technology could be used). [ME, PS, T]	Part	Unit	Lessons
		1	6	N7-29 to 37
7.N.3	Solve problems involving percents from 1% to 100%. [C, CN, ME, PS, R, T]	Part	Unit	Lessons
		2	9	N7-43, 44, 46, 47
7.N.4	Demonstrate an understanding of the relationship between repeating decimals and fractions, and terminating decimals and fractions. [C, CN, R, T]	Part	Unit	Lessons
		2	9	N7-39, 40
7.N.5	Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially, and symbolically (limited to positive sums and differences). [C, CN, ME, PS, R, V]	Part	Unit	Lessons
		1	4	N7-23 to 26

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Number				
7.N.6	Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically. [C, CN, PS, R, V]	Part	Unit	Lessons
		1	1	N7-7 to 14
		1	3	PR7-1
7.N.7	Compare and order fractions, decimals (to thousandths), and integers by using <ul style="list-style-type: none">• benchmarks• place value• equivalent fractions and/or decimals [CN, R, V]	Part	Unit	Lessons
		1	4	N7-22
		1	6	N7-28

Patterns and Relations (Patterns)

General Learning Outcome

Use patterns to describe the world and solve problems.

Specific Learning Outcomes

JUMP Math Lessons

7.PR.1 Demonstrate an understanding of oral and written patterns and their corresponding relations.
[C, CN, R]

Part	Unit	Lessons
1	3	PR7-3, 4, 8

7.PR.2 Construct a table of values from a relation, graph the table of values, and analyze the graph to draw conclusions and solve problems.
[C, CN, R, V]

Part	Unit	Lessons
1	3	PR7-3, 4, 6 to 8

Patterns and Relations (Variables and Equations)

General Learning Outcome

Represent algebraic expressions in multiple ways.

Specific Learning Outcomes

JUMP Math Lessons

7.PR.3 Demonstrate an understanding of preservation of equality by

- modelling preservation of equality, concretely, pictorially, and symbolically
- applying preservation of equality to solve equations

[C, CN, PS, R, V]

Part	Unit	Lessons
2	7	PR7-13 to 18

7.PR.4 Explain the difference between an expression and an equation.
[C, CN]

Part	Unit	Lessons
1	3	PR7-2
2	7	PR7-10, 12

7.PR.5 Evaluate an expression given the value of the variable(s).
[CN, R]

Part	Unit	Lessons
1	3	PR7-2

7.PR.6 Model and solve problems that can be represented by one-step linear equations of the form $x + a = b$, concretely, pictorially, and symbolically, where a and b are integers.
[CN, PS, R, V]

Part	Unit	Lessons
2	7	PR7-17

7.PR.7 Model and solve problems that can be represented by linear equations of the form:

- $ax + b = c$
- $ax = b$
- $\frac{x}{a} = b, a \neq 0$

concretely, pictorially, and symbolically, where a , b , and c , are whole numbers.
[CN, PS, R, V]

Part	Unit	Lessons
2	7	PR7-12 to 16, 18

Shape and Space (Measurement)				
General Learning Outcome				
Use direct or indirect measurement to solve problems.				
Specific Learning Outcomes		JUMP Math Lessons		
7.SS.1	Demonstrate an understanding of circles by <ul style="list-style-type: none">describing the relationships among radius, diameter, and circumference of circlesrelating circumference to pi (π)determining the sum of the central anglesconstructing circles with a given radius or diametersolving problems involving the radii, diameters, and circumferences of circles [C, CN, R, V]	Part	Unit	Lessons
		2	8	SS7-16, 17, 20, 21
		2	9	N7-42
		2	11	SS7-22, 23
7.SS.2	Develop and apply a formula for determining the area of <ul style="list-style-type: none">trianglesparallelogramscircles [CN, PS, R, V]	Part	Unit	Lessons
		2	8	SS7-12 to 15, 20, 21
Shape and Space (3-D Objects and 2-D Shapes)				
General Learning Outcome				
Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.				
Specific Learning Outcomes		JUMP Math Lessons		
7.SS.3	Perform geometric constructions, including <ul style="list-style-type: none">perpendicular line segmentsparallel line segmentsperpendicular bisectorsangle bisectors [CN, R, V]	Part	Unit	Lessons
		2	11	SS7-22, 24 to 29
Shape and Space (Transformations)				
General Learning Outcome				
Describe and analyze position and motion of objects and shapes.				
Specific Learning Outcomes		JUMP Math Lessons		
7.SS.4	Identify and plot points in the four quadrants of a Cartesian plane using ordered pairs. [C, CN, V]	Part	Unit	Lessons
		1	5	SS7-1 to 3
7.SS.5	Perform and describe transformations of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral vertices). [C, CN, PS, T, V]	Part	Unit	Lessons
		1	5	SS7-3 to 10

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Statistics and Probability (Data Analysis)

General Learning Outcome

Collect, display, and analyze data to solve problems.

Specific Learning Outcomes		JUMP Math Lessons		
		Part	Unit	Lessons
7.SP.1	Demonstrate an understanding of central tendency and range by <ul style="list-style-type: none"> determining the measures of central tendency (mean, median, mode) and range determining the most appropriate measures of central tendency to report findings [C, PS, R, T]	2	12	SP7-11, 12, 15, 16
7.SP.2	Determine the effect on the mean, median, and mode when an outlier is included in a data set. [C, CN, PS, R]	2	12	SP7-13, 14, 16
7.SP.3	Construct, label, and interpret circle graphs to solve problems. [C, CN, PS, R, T, V]	2	12	SP7-7 to 10, 16

Statistics and Probability (Chance and Uncertainty)

General Learning Outcome

Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

Specific Learning Outcomes		JUMP Math Lessons		
		Part	Unit	Lessons
7.SP.4	Express probabilities as ratios, fractions, and percents. [C, CN, R, T, V]	2	10	SP7-1 to 3
7.SP.5	Identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events. [C, ME, PS]	2	10	SP7-4, 5, 7
7.SP.6	Conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table, or another graphic organizer) and experimental probability of two independent events. [C, PS, R, T]	2	10	SP7-6