

**Manitoba Curriculum Correlation**

# **JUMP**Math

## **Manitoba Curriculum Correlation for Grade 8**



**jump math**<sup>™</sup>  
MULTIPLYING POTENTIAL.

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**JUMP Math**

Toronto, Ontario

[www.jumpmath.org](http://www.jumpmath.org)

**Notes**

Abbreviations for Mathematical Processes:

[C]	Communications
[CN]	Connections
[ME]	Mental Mathematics and Estimation
[PS]	Problem Solving
[R]	Reasoning
[T]	Technology
[V]	Visualization

JUMP Math units are represented by:

NS	Number Sense
PA	Patterns & Algebra
ME	Measurement
G	Geometry
PDM	Probability & Data Management

# JUMP Math–Manitoba Curriculum Correlations: Grade 8

Lesson Number	JUMP Math Lesson Title	Manitoba Mathematics Outcome(s)
<b>Grade 8 Part 1</b>		
<b>Unit 1</b>	<b>Number Sense</b>	
NS8-1	Factors and Multiples	6.N.3, preparation for 8.N.1, [R, C]
NS8-2	LCMs and GCFs	6.N.3, preparation for 8.N.6, [C, PS, R]
NS8-3	Prime Numbers	6.N.3, preparation for 8.N.1, [R, C, CN, V]
NS8-4	Prime Factorizations	6.N.3
NS8-5	Prime Factorizations and GCFs	6.N.3
NS8-6	Prime Factorizations and LCMs	6.N.3
NS8-7	Order of Operations	6.N.9
NS8-8	Fractions	6.N.4
NS8-9	Mixed Numbers	6.N.4
NS8-10	Improper Fractions	6.N.4
NS8-11	Mixed and Improper Fractions	6.N.4
NS8-12	More Mixed Numbers	6.N.4
NS8-13	More Mixed Numbers and Improper Fractions	6.N.4
NS8-14	Comparing Fractions — Introduction	6.N.4
NS8-15	Equivalent Fractions	7.N.5
NS8-16	Comparing Fractions Using Equivalent Fractions	7.N.5
NS8-17	Adding and Subtracting Fractions — Introduction	7.N.5
NS8-18	Adding and Subtracting Fractions	7.N.5
NS8-19	Adding and Subtracting Mixed Numbers	7.N.5
NS8-20	Mental Math	7.N.5
NS8-21	Investigating Fractions and Division — Advanced	7.N.5
NS8-22	Word Problems with Adding and Subtracting Fractions	7.N.5
NS8-23	Fractions of Whole Numbers	8.N.6, [V, R, CN, C]
NS8-24	Multiplying Fractions by Whole Numbers	8.N.6, [R, ME, CN, C]
NS8-25	Multiplying Fractions by Fractions	8.N.6, [C, R]
NS8-26	Dividing Fractions by Whole Numbers	8.N.6, [V, R, ME, C]

<b>Lesson Number</b>	<b>JUMP Math Lesson Title</b>	<b>Manitoba Mathematics Outcome(s)</b>
NS8-27	Dividing Whole Numbers by Fractions	8.N.6, [CN, R, C]
NS8-28	Operations with Fractions	8.N.6, [ME, C]
NS8-29	Dividing Fractions by Fractions	8.N.6, [R, CN, C]
NS8-30	Estimating Quotients of Fractions	8.N.6, [ME, R, V, C]
NS8-31	Word Problems	8.N.6, [PS, R, C]
NS8-32	Word Problems — Advanced	8.N.6, [PS, R, C]
NS8-33	Concepts in Fractions	8.N.6, [CN, ME, PS, C]
NS8-34	Decimal Fractions	7.N.2
NS8-35	Place Value and Decimals	7.N.2
NS8-36	Decimals, Money, and Measurements	7.N.2
NS8-37	Decimals and Fractions Greater Than 1	7.N.4
NS8-38	Comparing and Ordering Tenths and Hundredths	7.N.7
NS8-39	Ordering Decimals and Fractions to Thousandths	7.N.7
NS8-40	Regrouping Decimals	7.N.2
NS8-41	Addition Strategies for Decimals	7.N.2
NS8-42	Adding and Subtracting Decimals	7.N.2
NS8-43	Rounding Review	7.N.2
NS8-44	Rounding Decimals	7.N.2
NS8-45	Estimating Decimal Sums and Differences	7.N.2
NS8-46	Multiplying Decimals by 10	6.N.8, 7.N.2
NS8-47	Multiplying Decimals by 100 and 1 000	6.N.8, 7.N.2
NS8-48	Dividing Decimals by 10 and 100	6.N.8, 7.N.2
NS8-49	Multiplying and Dividing by Powers of 10	6.N.8, 7.N.2
NS8-50	Multiplying Decimals by Whole Numbers	6.N.8, 7.N.2, preparation for 8.N.3, [ME, CN, PS, V]
NS8-51	Multiplying Decimals by 0.1, 0.01, and 0.001	7.N.2, preparation for 8.N.3, [ME, PS, C, R, T, CN]
NS8-52	Multiplying Decimals by Decimals	7.N.2, preparation for 8.N.3, [ME, PS, C, R, T, CN]

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NS8-53	Multiplying Decimals by 2- and 3-Digit Decimals	7.N.2, preparation for 8.N.3, [ME, PS, R, C, CN, V]
NS8-54	Long Division — 3- and 4-Digit by 1-Digit	6.N.8, 7.N.2
NS8-55	Dividing Decimals by Whole Numbers	6.N.8, 7.N.2
NS8-56	Dividing Decimals by Decimals	7.N.2
NS8-57	Decimals Review	7.N.2, 7.N.7
<b>Unit 2</b>	<b>Patterns &amp; Algebra</b>	
PA8-1	Extending Patterns	preparation for 7.PR.1
PA8-2	Describing Patterns	preparation for 7.PR.1
PA8-3	T-tables	preparation for 7.PR.1
PA8-4	Patterns (Advanced)	preparation for 7.PR.1
PA8-5	Variables	7.PR.5
PA8-6	Substituting Fractions and Decimals for Variables	preparation for 8.PR.2, [CN, C]
PA8-7	Solving Equations — Guess and Check	8.PR.2, [R, C]
PA8-8	Solving Equations — Preserving Equality	8.PR.2, [R, C]
PA8-9	Solving Equations — Two Operations	8.PR.2, [R, PS, C, CN]
PA8-10	Solving Equations — Advanced	8.PR.2, [R, PS, C, CN]
PA8-11	Modelling Equations	7.PR.3, 7.PR.6, 7.PR.7, 8.PR.2, [V, PS, C]
PA8-12	Counter-examples	N/A
PA8-13	Exploring Preservation of Equality	8.PR.2, [CN, R, C]
PA8-14	Correcting Mistakes	8.PR.2, [R, C]
PA8-15	Word Problems	7.PR.7, 8.PR.2, [C, CN, PS, R]
<b>Unit 3</b>	<b>Number Sense</b>	
NS8-58	Perfect Squares	8.N.1, [R, C], 9.N.5
NS8-59	Factors of Perfect Squares	8.N.1, [R, C, CN], 9.N.5
NS8-60	Square Roots of Perfect Squares	8.N.1, [R, C, CN], 9.N.5
NS8-61	Prime Factorizations of Perfect Squares	8.N.1, [R, PS, T], 9.N.5
NS8-62	Square Roots of Non-Perfect Squares	8.N.2, [R, V, C], 9.N.6
NS8-63	Estimating Square Roots	8.N.2, [R, ME, T, V, CN, C], 9.N.5, 9.N.6

<b>Lesson Number</b>	<b>JUMP Math Lesson Title</b>	<b>Manitoba Mathematics Outcome(s)</b>
<b>Unit 4</b>	<b>Probability &amp; Data Management</b>	
PDM8-1	Bar Graphs	6.SP.1, 8.S.P1, [C, CN, T]
PDM8-2	Double Bar Graphs	6.SP.1, 8.S.P1, [T, CN, C]
PDM8-3	Line Graphs	6.SP.1, 6.SP.3, 8.S.P1, [C, CN, R, T]
PDM8-4	Investigating Line Graphs	6.SP.1, 6.SP.3
PDM8-5	Comparing Line Graphs	6.SP.1, 8.S.P1, [C, CN, R, T]
<b>Unit 5</b>	<b>Geometry</b>	
G8-1	Area of Triangles	7.SS.2
G8-2	Squares on a Grid	6.SS.6
G8-3	Length of Slant Line Segments	7.SS.2, 8.N.1, [CN, C, R, V]
G8-4	The Pythagorean Theorem	8.SS.1, [CN, PS, R, V]
G8-5	Proving the Pythagorean Theorem	8.SS.1, [C, CN, R, V]
G8-6	Problem-Solving — Using a Formula	8.SS.1, [C, CN, R, V]
G8-7	Using the Pythagorean Theorem	8.SS.1, [C, CN, PS, R, V]
<b>Unit 6</b>	<b>Measurement</b>	
ME8-1	Part-to-Part and Part-to-Whole Ratios	6.N.5
ME8-2	Equivalent Ratios	6.N.5, [R, C] 8N4
ME8-3	Solving Proportions	6.N.5, [R, C, CN, V], 8.N.4, 8.N.5
ME8-4	Word Problems	6.N.5, [R, C, CN, V], 8.N.4, 8.N.5
ME8-5	Circles	7.SS.1, 8.SS.1 [C, CN, R, ME, V]
ME8-6	Circumference	7.SS.1
ME8-7	Area of Circles	7.SS.2
ME8-8	Area, Circumference, and Perimeter	7.SS.2, 8.SS.1 [C, CN, R]
<b>Unit 7</b>	<b>Number Sense</b>	
NS8-64	Gains and Losses	preparation for 7.N.6, 8.N.7, [R, C]
NS8-65	Integers	preparation for 7.N.6, 8.N.7, [R, C, CN, V]
NS8-66	Adding Integers	preparation for 7.N.6, 8.N.7, [R, CN]
NS8-67	Adding Integers on a Number Line	preparation for 7.N.6, 8.N.7, [R, CN]
NS8-68	Subtracting Integers	7.N.6, preparation for 8.N.7, [R, CN, V, PS, C]
NS8-69	Subtraction Using a Thermometer	7.N.6, preparation for 8.N.7, [C, CN, R, T, PS, V, ME]
NS8-70	More Gains and Losses	7.N.6, preparation for 8.N.7, [V, C]
NS8-71	Word Problems	7.N.6, 8.N.7, [V, C]

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NS8-72	Multiplying Integers	8.N.7, [R, C]
NS8-73	Dividing Integers	8.N.7, [R, CN, C, PS]
NS8-74	Concepts in Integers	8.N.7, [R, CN, C, PS]
<b>Unit 8</b>	<b>Geometry</b>	
G8-8	Introduction to Coordinate Systems	6.SS.8, 7.SS.4
G8-9	Translations	7.SS.5
G8-10	Translations — Advanced	7.SS.5
G8-11	Reflections	7.SS.5
G8-12	Reflections — Advanced	7.SS.5
G8-13	Rotations	7.SS.5
G8-14	Transformations — Advanced	7.SS.5
<b>Grade 8 Part 2</b>		
<b>Unit 1</b>	<b>Number Sense</b>	
NS8-75	Relating Fractions and Division	7.N.4, 8.N.5, [R, T, CN, C]
NS8-76	Repeating Decimals	7.N.4, 8.N.3, [R, CN, T, C]
NS8-77	Using Decimals to Compare Fractions	7.N.4, 7.N.7, 8.N.3, [R, ME, C, CN]
NS8-78	Is the Fraction a Terminating or Repeating Decimal?	7.N.4, 8.N.3, [CN, R, C, T]
NS8-79	Adding and Subtracting Repeating Decimals	7.N.4, 8.N.3, [C, R, CN]
NS8-80	Writing Repeating Decimals as Fractions	7.N.4, 8.N.3, [R, CN, T]
NS8-81	Writing Repeating Decimals as Fractions (Advanced)	7.N.4, 8.N.3, [R, CN, T]
NS8-82	Percents	7.N.3
NS8-83	Adding and Subtracting Percents	7.N.3, 8.N.3, [R, CN, C, V]
NS8-84	Tenths, Decimals, and Percents	7.N.3, 8.N.3, [R, CN, C, V]
NS8-85	Fractions and Percents	8.N.3, 8.N.5, [CN, R, ME, C]
NS8-86	Visual Representations of Percents	7.N.3, 7.N.7, 8.N.3, 8.N.5, [CN, C, R, V]
NS8-87	Comparing Fractions, Decimals, and Percents	7.N.3, 7.N.7, 8.N.3, 8.N.5, [CN, C, R, V]
NS8-88	Finding Percents	7.N.3, 8.N.3, [V, ME, R, CN, C]
NS8-89	Further Percents	7.N.3, 8.N.3, [CN, R, ME, C]
NS8-90	Writing Equivalent Statements for Proportions	7.N.3, 8.N.3, [R, CN]

<b>Lesson Number</b>	<b>JUMP Math Lesson Title</b>	<b>Manitoba Mathematics Outcome(s)</b>
NS8-91	Using Proportions to Solve Percent Problems	7.N.3, 8.N.3, [CN, C, R]
NS8-92	Solving Percent Problems — Advanced	8.N.3, [CN, R, ME, C]
NS8-93	Percents Less Than 1%	8.N.3, [R, V, C]
NS8-94	Percents Greater Than 100%	8.N.3, [R, CN, V, C, T, ME]
NS8-95	Percent Problems	8.N.3, [R, CN, V, C, T, ME]
NS8-96	Relating Fractions, Ratios, and Percents	7.N.3, 8.N.3, [PS, R, C, CN]
NS8-97	Finding the Whole from the Part	7.N.3, 8.N.3, [V, R, PS, C]
NS8-98	Further Percent Problems	8.N.3, [CN, R, V, C]
NS8-99	Word Problems	8.N.3, [CN, R, V, C]
NS8-100	Three-Term Ratios	8.N.4, [R, V, CN, C]
NS8-101	Rates	6.N.5, 8.N.4, 8.N.5, [R, CN, C]
NS8-102	Using Unit Rates	6.N.5, 8.N.4, 8.N.5, [R, CN, C]
NS8-103	Ratio and Rates with Fractional Terms	8.N.4, 8.N.5, [R, CN, PS, T, C]
<b>Unit 2</b>	<b>Probability &amp; Data Management</b>	
PDM8-6	Relative Frequency Tables	7.SP.3, preparation for 8.SP.1, [R, V, C]
PDM8-7	Circle Graphs	7.SP.3, 8.SP.1, [R, V, CN, C]
PDM8-8	Drawing Circle Graphs	7.SP.3, [R, CN, T, C], preparation for 8.SP.1
PDM8-9	Reading Circle Graphs	7.SP.3, 8.SP.1, [R, ME, T, CN, C]
PDM8-10	Scatter Plots	8.SP.1, [R, ME, T, CN, C]
PDM8-11	Comparing Scatter Plots and Line Graphs	8.SP.1, [R, ME, T, CN, C]
PDM8-12	Histograms	N/A
PDM8-13	Drawing Histograms	N/A
PDM8-14	Comparing Graphs	8.SP.1, [R, ME, T, CN, C]
<b>Unit 3</b>	<b>Geometry</b>	
G8-15	Points and Lines	7.SS.3
G8-16	Angles and Shapes	6.SS.1
G8-17	Measuring and Drawing Angles	6.SS.1
G8-18	Making a Sketch	6.SS.1
G8-19	Perpendicular Lines	6.SS.1, 7.SS.3
G8-20	Supplementary and Opposite Angles	N/A



<b>Lesson Number</b>	<b>JUMP Math Lesson Title</b>	<b>Manitoba Mathematics Outcome(s)</b>
G8-21	Parallel Lines	7.SS.3
G8-22	Corresponding Angles and Parallel Lines	7.SS.3
G8-23	Alternate Angles and Parallel Lines	7.SS.3
G8-24	Angles and Triangles	7.SS.3
G8-25	Properties of Triangles	6.SS.4
G8-26	Solving Problems Using Angle Properties	7.SS.3
G8-27	Special Quadrilaterals	7.SS.3
G8-28	Properties of Quadrilaterals	7.SS.3
G8-29	Perpendiculars and Bisectors	6.SS.1, 7.SS.3
G8-30	Congruent Triangles	9.SS.9
G8-31	Congruence Rules	9.SS.9
G8-32	Triangles and Quadrilaterals	9.SS.9
G8-33	Triangles and Circles	9.SS.1
G8-34	Similarity	9.SS.3
G8-35	Similar Triangles	9.SS.3
G8-36	Properties of Similar Shapes	9.SS.3, 9.SS.4
<b>Unit 4</b>	<b>Patterns &amp; Algebra</b>	
PA8-16	Substituting Integers for Variables	8.PR.2, [C, CN, R]
PA8-17	Solving Equations — Guess and Check	8.PR.1, 8.PR.2, [C, CN, R]
PA8-18	Solving Equations	8.PR.2, [C, CN, R]
PA8-19	Concepts in Equations	8.PR.2, [C, CN, R, V]
PA8-20	Formulas	7.PR.1, 7.PR.2, 8.PR.1, [C, R, PS]
PA8-21	Formulas for Patterns	7.PR.1, 8.PR.2, [C, R, V]
PA8-22	Formulas for Patterns — Advanced	7.PR.1, 8.PR.2, [C, R, V]
PA8-23	Stepwise Rules	N/A
PA8-24	Finding Rules and Formulas	7.PR.1, 8.PR.2, [C, CN, R, V]
PA8-25	Graphs	7.PR.2, 8.PR.1, 8.PR.2, [R]
PA8-26	Sequences and Ordered Pairs	7.PR.2, 8.PR.1, [C, CN, R, V]
PA8-27	Graphing Sequences	7.PR.2, 8.PR.1, [C, CN, R, V]
PA8-28	Graphing Formulas	7.PR.1, 7.PR.2, 8.PR.1, 8.PR.2, [C, CN, R, PS, V]

<b>Lesson Number</b>	<b>JUMP Math Lesson Title</b>	<b>Manitoba Mathematics Outcome(s)</b>
PA8-29	Investigating Patterns	7.PR.1, 7.PR.2, 8.PR.1, 8.PR.2, [C, CN, R, PS, V]
PA8-30	Problems and Puzzles	7.PR.1, 7.PR.2, 8.PR.1, 8.PR.2, [C, CN, R, PS, V]
PA8-31	Investigating Equations — Advanced	6.PA.3, preparation for 8.PR.2, [C, R, PS]
PA8-32	Advanced Algebra	6.PA.3, 8.PR.2, [R]
<b>Unit 5</b>	<b>Number Sense</b>	
NS-104	Introduction to Powers	9.N.1, 9.N.2
NS-105	Investigating Powers	9.N.1, 9.N.2
NS-106	Powers and Expanded Form	9.N.1, 9.N.2
NS-107	Powers of Negative Numbers	9.N.1, 9.N.2, 9.N.4
NS-108	Exponents, Integers, and Order of Operations	9.N.1, 9.N.2, 9.N.4
NS-109	Concepts in Powers	9.N.1, 9.N.2
NS-110	Negative Fractions and Decimals	9.N.3
<b>Unit 6</b>	<b>Measurement</b>	
ME8-9	Right Prisms	6.SS.3, preparation for 8.SS.2, [C, CN, V]
ME8-10	Nets of Right Prisms	8.SS.2, 8.SS.3, [C, R, V]
ME8-11	Volume of Rectangular Prisms	6.SS.3, 8.SS.4, [C, CN]
ME8-12	Volume of Polygonal Prisms	8.SS.4, [C, R, V]
ME8-13	Volume of Cylinders	8.SS.4, [C, R, V]
ME8-14	Capacity	8.SS.4, [C, R, V]
ME8-15	Changing Units of Area and Volume	7.N.2, 8.SS.4, [C, CN, R]
ME8-16	Surface Area of Prisms	8.SS.2, 8.SS.3, [C, R, PS], 9.SS.2
ME8-17	Surface Area of Cylinders	8.SS.2, 8.SS.3, [C, CN, R, V, ME, PS], 9.SS.2
ME8-18	Surface Area and Volume	8.SS.2, 8.SS.3, 8.SS.4 [C, R, T, V, PS], 9.SS.2
<b>Unit 7</b>	<b>Geometry</b>	
G8-37	Euler's Formula	N/A
G8-38	Tessellations and Transformations	8.SS.6, [C, R]
G8-39	Angles in Polygons and Tessellations	8.SS.6, [C, CN, V]
G8-40	Tessellating Polygons	8.SS.6, [C, CN, V]
G8-41	Creating Tessellating Shapes	8.SS.6, [C, CN, V]
G8-42	3-D Drawings, Top and Front Views	8.SS.5, [V]

<b>Lesson Number</b>	<b>JUMP Math Lesson Title</b>	<b>Manitoba Mathematics Outcome(s)</b>
G8-43	Side Views	8.SS.5, [V]
G8-44	Side Views of Structures Built from Prisms	8.SS.5, [C, CN, V]
G8-45	Building Structures from Side Views	8.SS.5, [CN, R, V]
G8-46	Rotating Structures	8.SS.5, [C, R, V]
<b>Unit 8</b>	<b>Probability &amp; Data Management</b>	
PDM8-15	Mean, Median, Mode, and Range	7.SP.1
PDM8-16	Understanding Mean, Median, Mode, and Range	7.SP.1
PDM8-17	Using the Mean, Median, Mode, and Range	7.SP.1
PDM8-18	Theoretical Probability — Review	6.SS.4, 7.SP.4
PDM8-19	Theoretical Probability	6.SS.4, 7.SP.4
PDM8-20	Tree Diagrams	7.SP.5
PDM8-21	Counting Combinations	7.SP.5
PDM8-22	Compound Events	7.SP.5, 7.SP.6, 8.SP.2, [C, R]
PDM8-23	Concepts in Probability	7.SP.5, 7.SP.6, 8.SP.2, [C, R]
PDM8-24	Experimental Probability	7.SP.6, 8.SP.2, [C, CN, R]
PDM8-25	Complementary Events	N/A
PDM8-26	Samples and Sample Sizes	9.SP.1
PDM8-27	Bias in a Survey	9.SP.1
PDM8-28	Surveys and Experiments	9.SP.1