

GENERAL AND SPECIFIC LEARNING OUTCOMES BY STRAND

This section presents the general and specific learning outcomes for each of Applied Mathematics, Essential Mathematics, and Pre-Calculus Mathematics, organized by the strands from the *Kindergarten to Grade 8 Mathematics Manitoba Curriculum Framework of Outcomes*. Each chart includes the outcomes from Grades 8 to 12. For Applied Mathematics and Pre-Calculus Mathematics, the Grade 10 outcomes are identical and are from the Introduction to Applied and Pre-Calculus Mathematics 20S course.

The code for the Grades 10 to 12 outcomes is as follows:
Grade, Course, Topic, Outcome Number

Examples:

1. A code of 11A.L.1 is Grade 11 Applied Mathematics; Logical Reasoning topic, the first outcome of that topic.
2. A code of 10E2.C.1 is Grade 10 Essential Mathematics, Half Course II; Consumer Decisions topic, the first outcome of that topic.

Grade	Course	Topics
10	Essential Mathematics, Half Course I	Analysis of Games and Numbers, Personal Finance, Measurement, 2-D Geometry
10	Essential Mathematics, Half Course II	Analysis of Games and Numbers, Trigonometry, Consumer Decisions, Transformations, Angle Construction
10	Introduction to Applied and Pre-Calculus Mathematics	Measurement, Algebra and Number, Relations and Functions
11	Applied Mathematics	Measurement, Geometry, Logical Reasoning Statistics, Relations and Functions, Mathematics Research Project
11	Essential Mathematics, Half Course III	Analysis of Games and Numbers, Interest and Credit, 3-D Geometry, Statistics
11	Essential Mathematics, Half Course IV	Analysis of Games and Numbers, Managing Money, Relations and Patterns, Trigonometry, Design Modelling
11	Pre-Calculus Mathematics	Algebra and Number, Trigonometry, Relations and Functions
12	Applied Mathematics	Financial Mathematics, Logical Reasoning, Probability, Relations and Functions, Mathematics Research Project, Design and Measurement
12	Essential Mathematics, Half Course V	Analysis of Games and Numbers, Vehicle Finance, Statistics, Precision Measurement, Career Life
12	Essential Mathematics, Half Course VI	Analysis of Games and Numbers, Home Finance, Geometry and Trigonometry, Business Finance, Probability
12	Pre-Calculus Mathematics	Trigonometry, Permutations, Combinations and Binomial Theorem, Relations and Functions