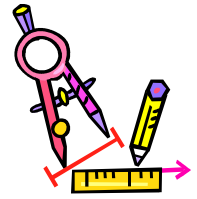




Cardinal Leger Secondary School Mathematics Department



Course Name: Principles of Mathematics

Course Code: MPM1D1

Level: Grade 9 Academic

Teacher:

Textbook: Principles of Mathematics 9

Course Fee:

Ministry Guidelines: Grades 9 & 10
Mathematics

Room:

Textbook Number:

Replacement Cost: \$80

Course Overview:

This course enables students to develop generalizations of mathematical ideas and methods through the exploration of applications, the effective use of technology and abstract reasoning. Students will investigate relationships to develop equations of straight lines in analytic geometry; explore relationships between volume and surface area of objects in measurement; and apply extended algebraic skills in problem solving. Students will engage in abstract extensions of core learning that will deepen their mathematical knowledge and enrich their understanding.

Curriculum Strands and Overall Expectations:

Number Sense and Algebra

By the end of this course, students will:

- demonstrate an understanding of the exponent rules of multiplication and division, and apply them to simplify expressions;
- manipulate numerical and polynomial expressions, and solve first-degree equations.

Linear Relations

By the end of this course, students will:

- apply data-management techniques to investigate relationships between two variables;
- demonstrate an understanding of the characteristics of a linear relation;
- connect various representations of a linear relation.

Analytic Geometry

By the end of this course, students will:

- determine the relationship between the form of an equation and the shape of its graph with respect to linearity and non-linearity;
- determine, through investigation, the properties of the slope and y-intercept of a linear relation;
- solve problems involving linear relations.

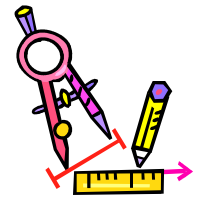
Measurement and Geometry

By the end of this course, students will:

- determine, through investigation, the optimal values of various measurements;
- solve problems involving the measurements of two-dimensional shapes and the surface areas and volumes of three-dimensional figures;
- verify, through investigation facilitated by dynamic geometry software, geometric properties and relationships involving two-dimensional shapes, and apply the results to solving problems.



Cardinal Leger Secondary School Mathematics Department



Evaluation

Term Work	70%
Knowledge and Understanding	30%
Application	30%
Communication	20%
Thinking	20%
Final Assessment	30%
Formal Examination	20%
EQAO	10%
Course Total	100%

Learning Skills and Work Habits

E= Excellent G=Good S=Satisfactory N= Needs Improvement

Responsibility	<ul style="list-style-type: none"> • Fulfills responsibility and commitments. • Takes responsibility for and manages own behavior.
Organization	<ul style="list-style-type: none"> • Devises and follows a plan and process for completing tasks. • Establishes priorities and manages time
Independent Work	<ul style="list-style-type: none"> • Independently monitors, assesses, and revises plans to complete tasks and meet goals. • Uses class time to complete tasks.
Collaboration	<ul style="list-style-type: none"> • Accepts various roles and an equitable share of work in a group. • Builds healthy peer-to-peer relationships.
Initiative	<ul style="list-style-type: none"> • Looks for and acts on new ideas and opportunities. • Approaches new tasks with a positive attitude.
Self-Regulation	<ul style="list-style-type: none"> • Sets own goals and monitors progress towards achieving them. • Seeks clarification or assistance when needed.

Missed/Late/Incomplete Assignments

It is the student's responsibility to address missed, late, or incomplete assignments. Students are expected to complete assignments and to adhere to assignment deadlines as follows:

Due Date	10% Penalty Zone	Closure Date
A due date is set by the teacher.	1 school day late – 3% 2 school days late – 6% 3 school days late – 10% Maximum penalty of 10%	Once the closure date has passed, work is considered incomplete and a mark of zero applies.

Parent Signature: _____ Student Signature: _____