

Henry Street High School

MPM 1D1

Principles of Mathematics, Grade 9, Academic

COURSE OUTLINE

COURSE DESCRIPTION

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

UNITS OF STUDY

UNIT 1 – Rational Numbers

UNIT 2 – Powers and Polynomials

UNIT 3 – Linear Relations

UNIT 4 – Linear Equations

UNIT 5 – Analytic Geometry

UNIT 6 – Investigating Relationships

UNIT 7 – Properties of 2-D Figures

UNIT 8 – Measurement

ASSESSMENT AND EVALUATION

ASSESSMENT STRATEGIES

- ❖ Unit Tests
- ❖ Quizzes
- ❖ Journals
- ❖ Investigations
- ❖ Inquiries
- ❖ Projects
- ❖ Assignments
- ❖ Final Summary Booklet
- ❖ Final Examination

EVALUATION

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| ❖ Termwork | 70% |
| ❖ Final Summative Evaluation | 30% |

OTHER INFORMATION

CLASS REQUIREMENTS

- ❖ Textbook: Principles of Mathematics 9, Nelson
- ❖ Equipment: Scientific calculator, 3-ring binder, lined paper, graph paper, pencil, coloured pens or pencils, eraser, ruler, geometry set