

MFM 2P
Principles of Mathematics, Grade 10 Applied
Course Outline

PART A: Preparation and Gearing Up (10 hours)

- ⇒ revisit the 4 categories of the achievement chart
- ⇒ review the grade 9 curriculum
- ⇒ take a diagnostic test

PART B: Curriculum Content

UNIT 1: Measurement and Trigonometry (34 hours)

- ⇒ identify conditions for similar and congruent triangles using Sketchpad
- ⇒ determine inaccessible heights, lengths and distances
- ⇒ apply SOH-COH-TOA and the Pythagorean Theorem
- ⇒ determine the lengths of sides of similar triangles
- ⇒ solve relate problems
- ⇒ relate slope of a line to the tangent trig ratio

UNIT 2: Linear Systems (28 hours)

- ⇒ find the point of intersection graphically and algebraically
- ⇒ interpret the point of intersection in a distance-time graph
- ⇒ graph a straight line
- ⇒ write the equations of a line from given information
- ⇒ solve systems of two linear equations
- ⇒ solve related problems

UNIT 3: Quadratic Functions (28 hours)

- ⇒ explore properties of quadratics by folding and using different tables
- ⇒ use transformations of circles to understand them for parabolas
- ⇒ investigate symmetry properties of parabolas
- ⇒ investigate forms of quadratic functions with context
- ⇒ use or collect data to learn about quadratic equations
- ⇒ identify key features of a parabola

PART C: Summative Assessment (5 hours)

- ⇒ testing in class using notebook and textbook as resources

PART D: Final Exam Review (5 hours)

- ⇒ review of all topics done in class the last week of semester
- ⇒ final exam written by all students during exam timetable