Applications of Math 10

Course Outline

Text: Addison-Wesley Applications of Math 10

Chapter 0	Solving Equations
	• Review of Equation Solving • Solving Rational Equations • Formula Manipulation • Review of Pythagoras • Applications of Pythagoras

Chapter 1	Measurement
	• arithmetic operations on irrational numbers using decimal approximations • volume and surface area • problems involving time, mass, and rates • determining the relationship between linear scales and changes in area and volume • using appropriate units and instruments to measure lengths, areas, and volumes • limitations of measuring instruments and error
Chapter 2	Number Patterns in Tables
	• using words and algebraic expressions to describe data • analysing data in a table and combinations of tables • creating and modifying recursive and non-recursive tables • using and modifying spreadsheets

Chapter 3	Relations and Functions • plotting linear and non-linear data, using appropriate scales • representing data using function models • using a graphing tool to draw the graph of a function from its equation • describing a function • function notation • domain and range
Chapter 4	Sampling • choose, justify, and apply sampling techniques that will result in an unbaised sample • defend or oppose inferences about populations based on data from samples • reliability, validity, and bias of a sample
Chapter 5	Line Segments • solving problems using distances, slopes, and midpoints between points on a coordinate plane • slopes of parallel and perpendicular lines

Chapter 6	Linear Functions
	• intercepts, slope, domain, and range of a linear function • partial variation • arithmetic sequences • equation of a line • line of best fit • using technology to determine the correlation coefficient (*r*)
Chapter 7	Trigonometry
	• problems involving two right triangles • sine and cosine laws • trigonometric rations on the coordinate plane (as time permits)
N/A	Problem Solving (integrated throughout the course)
	• various problem solving strategies will be emphasized