

GRADE 12 (2014) – MATHEMATICAL LITERACY ASSESSMENT PROGRAMME

TOPIC / CONTEXT	SECTION	BASIC SKILLS / CONTEXT	FORMAL ASSESSM'T
Numbers & Calculations in Context	Percentages Proportion Ratio Rates	November 2013: Revision of Grade 11 concepts: Percentage notation and percentage calculations Direct and indirect (inverse) proportion Basic ratio and rate calculations (incl foreign exchange tables)	Control Test on revision of Gr.11 concepts. (Due: 4 Dec)
TERM 1: 2014 Patterns, relationships & representations	Conversions Conversion graphs Converting rate Time Temperature	Converting between different systems, including metric to imperial units & appropriate to the context. Working with two or more relationships & representations in determining values in tables & graphs – contexts related to linear, direct & indirect proportion, compound growth	<p><u>Task 1</u> Assignment on Financial aspects (Due: 2nd wk Feb)</p> <p><u>Task 2</u> Investigation on Vehicle Finance (Due: end Feb)</p> <p><u>Task 3</u> March Exam (1 Paper – 2hrs)</p> <p><u>Task 4</u> Assignment on Planning issues (Due: mid May)</p> <p><u>Task 5</u> June Exam (2 Papers – 2hrs)</p> <p><u>Task 6</u> Control Test: (Due: end Aug)</p> <p><u>Task 7</u> Trials Exams (September) (2 Papers – 3hrs)</p>
Finance	Finan. Documents Tariff systems Cost/Selling price Profit/loss Income/Expenditure statements Budgets Break-even analysis Interest Hire-purchase Loans & Investments Inflation Taxation	Limited to those that deal with personal, household, workplace, small business and national finance – Demonstrate how the values in the documents have been determined. Calculate costs, draw & interpret graphs of various tariffs Calculations involving income, expenditure, profit & loss values, including fixed and variable values Determine cost of production &/or cost price and selling price of an item based on an expected percentage profit Break-even values using graphs and substitution in rules Simple & compound interest with loans & investments Calculation of interest on different types of accounts Investigate changes in prices & the impact over time Calculations involving VAT & Employee taxation Work with rates presented in foreign exchange tables	
Data Handling	Develop questions Collecting data Classifying and organising data Summarising data Representing data Analysing data	Questions that requires the collection of 2 sets of data Collect data on problems relating to the wider community Classify discrete & continuous data, group data using intervals, organize data using tallies & frequency tables Representing 2 sets of data in various types of graphs Measures of central tendency & spread (include quartiles, percentiles & link to box and whisker diagrams) Select, justify & use a variety of methods to summarize & display data in statistical graphs, including frequency polygon Analyzing data presented in graphs to identify trends Situations where data is interpreted in different ways Critically interpret data in order to draw conclusions on problems to predict trends. Base arguments on the use & misuse of statistics in society & make justified recommendations.	
TERM 2 & 3 Measurement	Length & distance Mass (weight) Perimeter, Area & Volume	Calculate values using formulae for perimeter, area & volume and express answers in appropriate units Solve problems in 2- & 3-dimensional contexts with regard to: surface areas & volume (of prisms, cylinders, cones, spheres). Calculate quantities & cost of materials needed for a task	
Maps, Plans and other Representation	Scale Maps Plans Models	Working with various types of scales- calculating actual distances, rates & determining the scale on a map or plan Performing calculations in the context of maps, plans, models and rates (for example: costs, speed, consumption rates) Describing location & bearing on various types of maps Use & interpret scale drawings of plans. Use grids & maps, and compass directions. 2-Dimensional Floor, elevation and design plans Make & use 3-D scale models of packaging containers Solving problems of 3-D objects/models involving packaging containers and buildings	
Probability	Expressions Prediction Representations for determining possible outcomes	Definition of probability & interpretation of ranges 0 – 1 Tests where there is a chance of inaccurate results Recognise that probability is predictions about the outcome of an event & the future based on past events Identify possible outcomes for compound events by making use of tree diagrams & two-way tables	