GRADE 12 MATHEMATICAL LITERACY

WORK FOR THE SEPTEMBER EXAMS

Structure of the exams:

Two 3 hour papers of 150 marks each.

Content

Both papers will examine all the work. The papers will be differentiated according to difficulty levels.

Paper 1 will only cover level 1 and level 2 questions.

Paper 2 will cover questions on levels 1, 2 and 3.

Please consult the detailed description of the levels handed out in class

Work to be learnt

- Percentage:
  - calculating a percentage
  - calculating an amount given a percentage
  - percentage increase and decrease
- Ratio
  - Simplifying ratios
  - Increasing/decreasing in a given ratio
  - Sharing in a ratio
  - Finding an amount given a ratio
- Rate
- Proportion (direct and inverse proportion)
- Speed, distance, time
- Tax tables
- Exchange rates
- Work with municipal rates tables
- Inflation
- Graphs
  - Drawing graphs from a given table of values or an equation
  - Drawing more than one graph on the same system of axes
  - Drawing step graphs
  - Finding break-even values
  - Interpreting graphs
    - Reading values from given graphs
    - Increasing or decreasing graph
    - Describe what is happening at certain points
  - Drawing conclusions from a given graph
  - Finding rate of change
  - Using the rate of change to describe the graph

- Measurement
  - Area, perimeter of square, rectangle, circle and triangle
  - Surface area
  - Volume
  - Pythagoras
  - Map scale
  - Building plans
    - Calculate area,
    - Calculate quantities of material
    - Scale
  - Bearing
  - Grid references
- Probability (tree diagrams will only be in paper 2)
- Statistics
  - Represent data
    - Pie graphs
    - Bar graphs(including double and compound)
    - Line graphs
    - Frequency tables
  - Draw conclusions
  - Central tendency and spread
    - Mean
    - Median
    - Mode
    - Quartiles
    - Percentiles
    - Range