HSC   General MATHEMATICS   ASSESSMENT TASK
DATE: Friday 24nd Feb, 2010   Per 1 **TIME ALLOWED**: 60 minutes **ASSESSMENT WEIGHTING:** 10%
BOARD OF STUDIES OUTCOMES ADDRESSED: H1 Appreciates the importance of mathematics in her/his own life and its usefulness in contributing to society H2 Integrates mathematical knowledge and skills from different content areas in exploring new situations H3 Develops and tests a general mathematical relationship from observed patterns H4 Analyses representations of data in order to make inferences, predictions and conclusions H5 Makes predictions about the behaviour of situations based on simple models H6 Analyses two-dimensional and three-dimensional models to solve practical and mathematical problems H7 Interprets the results of measurements and calculations and makes judgements about reasonableness H8 Makes informed decisions about financial situations H9 Develops and carries out statistical processes to answer questions which she/he and others have posed H10 Solves problems involving uncertainty using basic principles of probability H11 Uses mathematical argument and reasoning to evaluate conclusions drawn from other sources, communicating his/her position clearly to others

ASSESSMENT CRITERIA:
Topic: 1   Right Angled Triangles
In this task you will be assessed on your ability to:
   1. Use Pythagoras' theorem to find an unknown side in a right-angles triangle
   2. Application of Pythagoras' Theorem
   3. Define sine, cosine, and tangent ratios
   4. Use trigonometry to find the length of an unknown side and size of an angle in a right angled triangle
   5. Solve problems involving angles of elevation and depression
   6. Determine the suitability of answers involved in trigonometry
Topic: 2   Financial Maths – Credit and Borrowing
In this task you will be assessed on your ability to:
   1. Calculate the principal, interest and repayments for flat loan rates
   2. Calculate values of home loan repayments
   3. Comparison of different options for borrowing money in relation to total repayments, fees, interest rates and flexibility
   4. Calculation of credit card payments, incorporating fees, charges, rates and interest free periods
   5. Use of published tables from financial institutions to determine monthly repayments on reducing balance loan

INSTRUCTIONS:
   • This task will be completed in class
   • Approved calculators may be used

- Show all necessary working. Marks will not be given for answers where working is required.
- Answers to be completed on the assessment paper