Croydon Maroondah College

General Mathematics Orientation Handout

Required Materials

Text: *Essential Standard General Mathematics* 2nd Edition by Jones, Lipson, Main and Tulloch. Make sure you get the version for the Casio Classpad calculator.

Calculator: An approved graphics calculator is required. We use the Casio Classpad. Please ensure you obtain one before the start of Term 1 (put it on your Christmas wish list!). You will use the calculator until at least the end of Year 12, and if you look after it will have a decent resale value.

Workbooks: The suggestion is to have at least 2 workbooks. One will be your class book where you complete the class notes and set problems for each chapter. The second will be your theory book; it will contain summary notes (which you will need to make for every chapter) covering the key concepts and calculator instructions covered in each chapter. Also rewrite into your theory book the 6-10 problems that you think are the hardest or the trickiest or the ones that you are most likely to get wrong in an exam. You may also paste printed information into this book, but under VCAA rules each printed page must be entirely stuck down, with no foldouts. This book needs to be at least 120 pages. The purpose of the theory book is to provide a comprehensive source of revision for the end of unit exams. The theory book may also be used during assessment tasks and exams as your bound reference. Please ensure these books have a large amount of pages and are not spiral books with perforated edges.

Brief Overview of the Course

There are six areas of study outlined in the VCE Study Guide for General Mathematics. We will not be covering all of the topics in the study guide (or in the textbook) – just the ones listed here that you will need as a basis for Further Mathematics in Year 12. We will not be covering them in the order listed.

1. Arithmetic
    - Matrices (Chapter 11)
2. Data analysis
    - Univariate data (Chapter 1)
    - Bivariate data (Chapter 4)
3. Algebra
    - Linear relations and equations (Chapter 2)
4. Graphs of linear relations
    - Linear graphs and modelling (Chapter 3)
5. Decision and business mathematics
    - Networks (Chapter 10)
6. Geometry and Trigonometry
    - Shape and measurement (Chapter 5)
    - Trigonometry (Chapter 7)

These topics will be revisited and extended in Units 3 and 4.

Assessment

Examinations

There is an examination at the end of each unit (May for Unit 1 and November for Unit 2) that will assess the topics covered in that Unit. These are set and marked by your teachers. You may use your calculator (including any programs you have stored) and one bound reference book for both exams.

Outcomes

There are 3 outcomes for each unit. The result for each outcome and for the unit is either Satisfactory (S) or Not Satisfactory (N). To get an S for the unit you must get an S for all the outcomes.
S or N will be determined by a combination of your classwork, your workbook, and assessment tasks.
You may read the exact wording on the VCAA website, but basically the outcomes are:
Outcome 1- being able to define and explain key concepts and use this knowledge to solve routine problems.
Outcome 2- being able to apply your knowledge in an extended situation and then discuss these applications of mathematics.
Outcome 3- being able to use appropriate technology (graphics calculator, computer).

In addition, you must meet the 90% attendance requirement to gain an S for all VCE subjects.

Assessment Tasks

There will be an assessment task during class time at the end of each topic. This will be in one of the following forms:

1. Topic test – a 1 period test with multiple choice and extended answer questions.

2. Analysis task – a 1-2 period task with extended answer questions that includes analysis of your answers.

3. Application task – a 3 period project on Bivariate Data (probably in term 3). This assessment task is generally considered by students to be the most demanding task of the year.

Each task is graded according to a set of criteria derived from each Outcome. Your score will reflect how well you've met each outcome, and will be used to assess an S or N result. Your combined score for each form of assessment task will be included in your reports.
Make sure you are thoroughly prepared for each assessment task!

Please note that if you miss (due to an approved absence) or fail a task you will be given an opportunity to re-sit the task. Please use the opportunity wisely. Otherwise, as teachers we have no choice but to give you a fail for the task.

Absences

If you miss a class (for whatever reason) it is your responsibility to catch up. Talk to a classmate or your teacher to find out what you missed, and try to make it up before the next class.

This week

This week we will be starting Chapter 1 on Univariate Data. A copy of the chapter is online at:
S:\Students\Year 11\Maths\General\Chapter 1\Univariate Data.pdf

It is also available on the web at: http://year11generalmaths.weebly.com/

We will cover sections 1.1 to 1.3 inclusive. There will also be some holiday homework.

We wish you the best of success in General Mathematics!!!!