

FURTHER MATHEMATICS REQUIREMENTS TO ACHIEVE A SATISFACTORY (S)

Important Information

All students studying Further Mathematics **must** have:

Maths Quest 12 – Further Maths – TI nSpire Edition
TI – nSpire CAS Calculator

Further mathematics units 3 and 4 will consist of a compulsory area of study and three modules.

Core – Data Analysis

Module 3 – Graphs and Relations

Module 5 – Networks and Decision Maths

Module 6 – Matrices

Further Maths Outcomes

To satisfactorily pass Further Maths students need to demonstrate three outcomes.

Outcome 1: Define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures.

Outcome 2: Apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics.

Outcome 3: Select and use a computer algebra system (TI-NSpire) and other technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Each outcome is represented in both SACs and classwork so it is important that classwork is completed throughout the course of the year and that your teacher can authenticate your classwork to demonstrate these outcomes.

Students will be required to have their exercises checked and marked off at the end of each section. Each SAC will be graded and given a percentage. Please note that SACs are not returned to students but each student will be informed of their grade and will see their SAC after moderation has occurred.

Note: It is compulsory for all students to bring their TI-NSpire calculators and textbook to every class.

Bound Reference Book Guidelines

Students are allowed to take a bound reference into designated Mathematics examinations. This resource is intended to provide students with access to mathematics- related reference material that may be of assistance during the examination. A suitably qualified member of the school teaching staff will check the appropriateness of reference materials as students enter the examination room for Mathematics examinations where these items are permitted.

Specifications for bound reference

- the bound reference must be in book format of A4 size or smaller when closed
- the number of pages is not specified
- pages must be permanently bound and securely attached to the spine
- there must be a single horizontal or vertical spine.
- the bound reference may be:
 - a textbook
 - a securely bound lecture pad
 - a permanently bound student-constructed set of notes without fold-outs
 - an exercise book
- the form of binding is not specified but it must be secure, and pages must not be readily detachable or designed to be removed. **Binding can include cloth, glue, staple, spiral or comb binding.**

Students are allowed to:

- annotate the material
- design their own written index
- fold pages
- cut page corners
- colour code pages
- insert dividers into their own sets of notes
- firmly attach (for example, by glue, adhesive tape or staples) additional material to pages in the bound reference
- bound references **may be consulted during reading time** and throughout the examination

The following is prohibited:

- pages or parts of pages that can be detached from the bound reference during the examination
- fold-outs, maps or brochure-style components
- **No books with perforations**
- **removable tabs, post-it notes** or other pages or material designed to be detached
- forms of collation/binding that are designed to be non-permanent and the content modified by insertion including:
 - ring-binder folders
 - plastic A4 sleeves(permanent or removable) from which pages may be removed
 - manila and similar folders with clip, clamp, slide and metal prong-style binding of loose-leaf material.

Important

If any page is detached from the rest of the bound reference, the page will be removed by the supervisor for the duration of the examination and the incident will be reported as a potential breach of rules.

FURTHER MATHEMATICS

Holiday Homework

Instructions

You need to complete all exercises and questions in chapter 1 (see checklist provided).

Due Date: This homework will be collected during your first lesson of Term 1, 2015

At the start of 2015 (probably your first lesson) you will have a test on Chapter 1 to demonstrate your knowledge and understanding.

Chapter 1

Topic	Exercise	Questions to Complete
Types of Data	1A	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4
Stem Plots	1B	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 <input type="checkbox"/> Q5 <input type="checkbox"/> Q6 <input type="checkbox"/> Q7 <input type="checkbox"/> Q8 <input type="checkbox"/> Q9 <input type="checkbox"/> Q10
Dot Plots, Frequency Histograms & Bar Charts	1C	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 <input type="checkbox"/> Q5 <input type="checkbox"/> Q6
Describing the Shape of Stem Plots and Histograms	1D	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 <input type="checkbox"/> Q5 <input type="checkbox"/> Q6 <input type="checkbox"/> Q7 <input type="checkbox"/> Q8 <input type="checkbox"/> Q9
Median, Interquartile Range, Range and Mode	1E	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 <input type="checkbox"/> Q5 <input type="checkbox"/> Q6 <input type="checkbox"/> Q7 <input type="checkbox"/> Q8
Box Plots	1F	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 <input type="checkbox"/> Q5 <input type="checkbox"/> Q6 <input type="checkbox"/> Q7 <input type="checkbox"/> Q8
Mean	1G	<input type="checkbox"/> Q1 <input type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 <input type="checkbox"/> Q5 <input type="checkbox"/> Q6 <input type="checkbox"/> Q7 <input type="checkbox"/> Q8

Organising and displaying data