



A guide to success in General Maths

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How to Succeed in General Maths

Introduction

This resource provides key information including resources and strategies tailored for General Maths students.

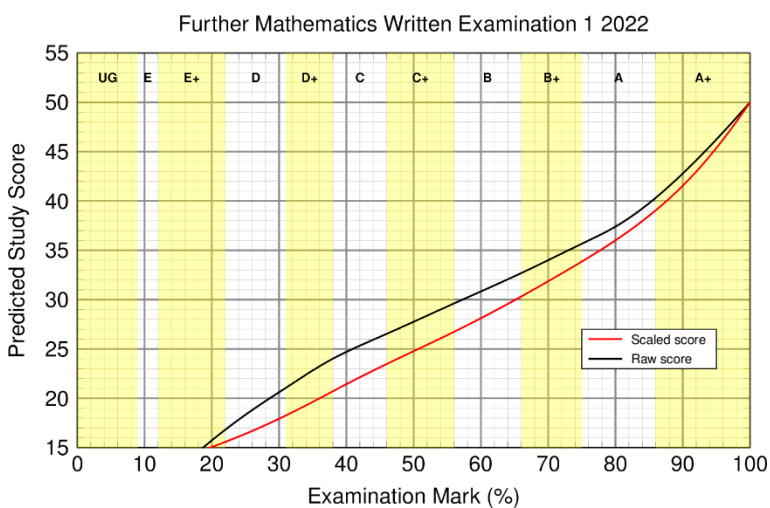
Exam weighting

- SAC40%
- Exam130%
- Exam230%

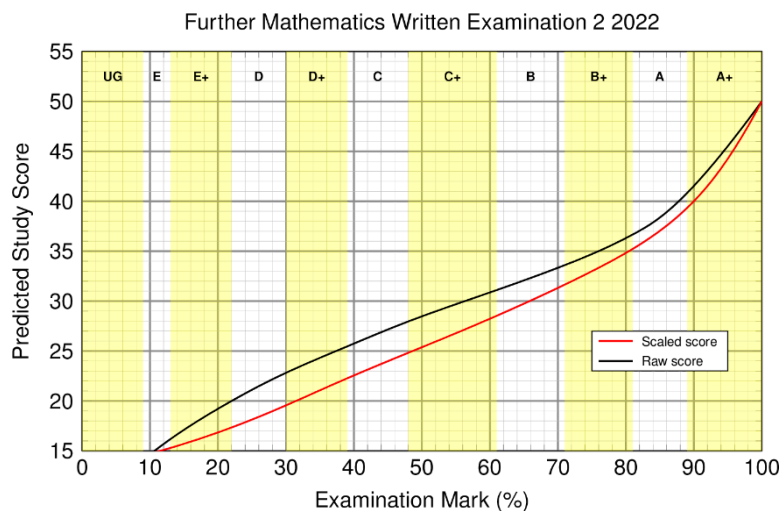
60% of your study score is decided within two days of exams - be exam focused during the year.

Study Score Predictor

Sit the 2022 papers to predict what raw study score you would likely obtain. Note that SAC marks are not accounted for.



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Looking at these predictors from 2020-2024, to obtain a 40+, students require at least a 90% exam mark on average.

How should I study during the year? Study for the exams whilst preparing for SACs

By regularly attempting exam style questions throughout the year and revising content - so you can jump straight into practice exams after Term 3.

- Every fortnight, review the previous content covered and attempt x amount questions to consolidate your understanding.
- Collate questions you have gotten incorrect and find your weaknesses (turn them into strengths before exam season)

How can I prepare leading up to SACs?

General Maths SACs usually do not include MCQs (multiple choice questions). Therefore, it would be advisable to use previous GM examination 2 papers as practice for the SAC since you will be providing written responses.

Resources for SAC and Exam Preparation

- [VCAA past exams](#) + [NHT](#) + [vce rocks Vicmathnotes](#) (notes,
- videos, exam questions grouped by topic)

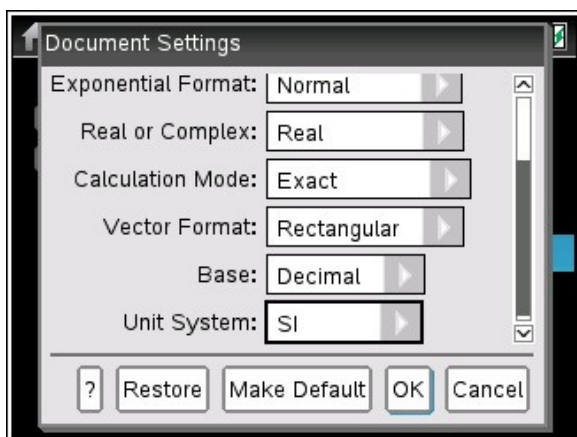
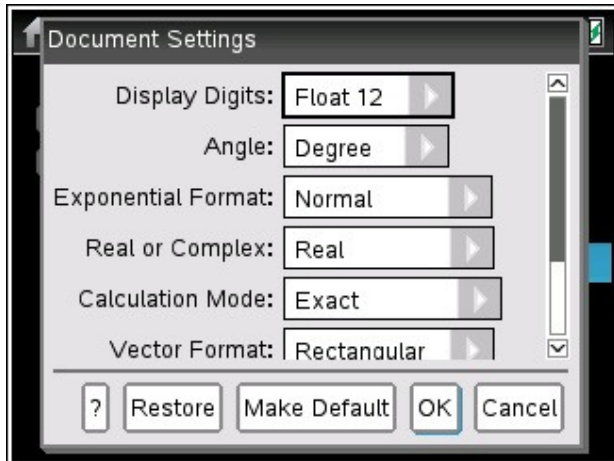
Getting Familiar with the calculator

Knowing the most efficient ways of solving questions is extremely important in General Maths. All SACs and exams permit the use of a calculator (unlike methods) - so mastering its use is essential to receiving a high study score.

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Students should experiment with different ways of solving a question through the calculator – a google search and helpful friends are handy!

Recommended CAS Settings



CAS mode should be On Press ctrl + enter to convert fraction to decimal



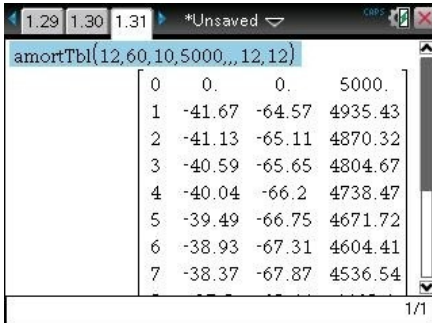
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Useful CAS functions

Amortisation Table

amortTbl(NPmt,N,I,PV, [Pmt], [FV], [PpY], [CpY], [PmtAt],[roundValue]) Example:

amortTbl(12,60,10,5000,,,12,12)

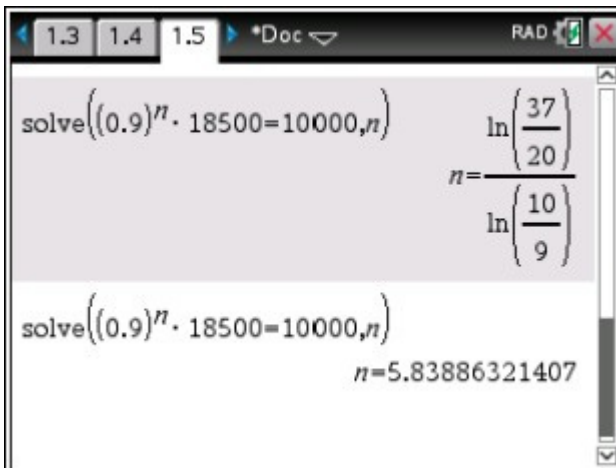


0	0.	0.	5000.
1	-41.67	-64.57	4935.43
2	-41.13	-65.11	4870.32
3	-40.59	-65.65	4804.67
4	-40.04	-66.2	4738.47
5	-39.49	-66.75	4671.72
6	-38.93	-67.31	4604.41
7	-38.37	-67.87	4536.54

Explanation

Formula on tables

Solve function Depreciation Example: How many years until product value reaches \$10,000



$\text{solve}\left((0.9)^n \cdot 18500 = 10000, n\right)$

$$n = \frac{\ln\left(\frac{37}{20}\right)}{\ln\left(\frac{10}{9}\right)}$$

$\text{solve}\left((0.9)^n \cdot 18500 = 10000, n\right)$

$$n = 5.83886321407$$

Mastering The Financial Solver

Learn how to use the financial solver function (Menu:8:1) on the CAS and note how the (+/-) sign changes for different loans and investments.

Reducing Balance Loans

PV positive
PMT negative FV negative / zero
(when paid off)

Annuity

PV negative
PMT positive
FV positive/zero (if all money withdrawn)

Perpetuity

PV negative
PMT positive
FV positive PV and FV value same except for (+/-) sign N any value

Annuity with Additional Payment

PV negative PMT negative FV positive

Interest-Only Loan

PV positive
PMT negative
FV negative
PV and FV value same except for (+/-) sign N any value



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Exam preparation

How many exams should I do?

There is no golden rule on how many practice exams you should complete. There are many high scorers who completed 5-6 exams and many who sat 20-30 practice exams. You should aim to learn as much as you can from each practice exam and even improve your timing and strategy.

You should spend at least 30 minutes reviewing each practice exam (can take longer if you need to learn from more mistakes).

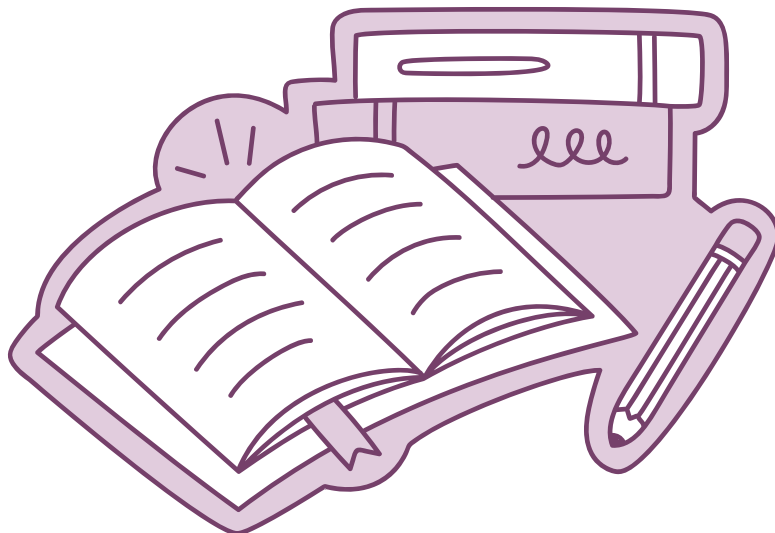
How do I even review my exams?

1. Fully mark the exam and write the correct answer in red where you were incorrect
2. Re-attempt the questions you got wrong (and seek help if you still cannot get to the correct answer)
3. Determine if the mistake was a: silly mistake or lack of understanding
4. Group the questions you are struggling with into a document and find out how to solve them (either yourself or ask a tutor/friend/teacher for help)

At the early stage of exam prep, you should now know which topics are your weakest - go and revisit them if need be.

Getting an answer correct or incorrect is not everything.

You can even discuss with others how they answer questions - to develop the quickest and most effective strategies for answering certain question types.



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Targeted practice

For your weaker areas of study, revisit the topic and do sets of targeted practice ~10-20 questions. Use [vicmathnotes](#)/textbook/exam questions to target specific topics (vicmathnotes compiles previous exam questions by topic).

Exam conditions

Try to practice in a quiet study space with a bounded reference. Record your timing – and note it down

Bounded reference

You should not aim to rely on your bound reference. The best students prepare enough for the exam – so formulas are ingrained in their memory. They usually only use the bound reference to check over their responses and to answer more difficult questions.

- Include formulas and other important information (r-value, normal distribution)
- Include step-by-step working out for more difficult questions
- Try to keep the bounded reference short (may waste time flicking through pages)
- Familiarise yourself with the bounded reference during practice exams

Which exam companies should I use?

VCAA is your best friend – you should aim to complete at least 10 VCAA previous exams before looking at other companies.

MAV creates slightly difficult exams – use it to perfect your timing and learn from your mistakes.

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I keep making silly mistakes, how can I overcome them?

Re-reading the question and paying attention to the values mentioned. Focusing solely on the exam paper - cut out distractions at home. After enough practice, you begin to anticipate where you make silly mistakes – causing you to pre-emptively check over your answers.

What does it take to get a 50 study score?

- Being exam focused during the year.
- Putting SAC results behind you and focusing on what lies ahead.
- Doing what is within your control.
- Minimal mistakes on the Final Two Exams (by completing mock exams).

NB: Students with a SAC rank of 4 have gotten 50s before.

Exam technique

If you have done enough preparation, the big difference you can make is by performing on the day. Your strategy for answering questions can help you score higher

- Skip difficult questions and attempt them towards the end to maximise marks
- Re-read the question and values mentioned to ensure no silly mistakes are made
- Some students find it easier to start with Matrices or Finance to get into a good flow before attempting other sections (experiment with this – different for everyone)



Want More Support?

We've got some amazing , high-quality VCE courses at Happy Brain, run by top scorers from around the state, to help you go leaps-and-bounds beyond and achieve your dream scores.

For more information, check out our website!

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Good Luck!

