

Grade 12 MATHS JUNE EXAM PREPARATION

Make time to go through all your maths prior to the exam. Your schedule is busy, but you cannot study for maths only on the day before you write.

The mind increases in power and efficiency by use. It becomes strong by hard thinking. ☺

You may use, amongst other sources, the golden **Examination Aid book** to prepare for the exam: “MATHEMATICS GRADE 12 CAPS PAPERS AND SOLUTIONS.” The table of contents on the first page indicates the sources of these question papers. Leave out the IEB question papers for now. (Some questions from the IEB papers are VERY difficult ☺.)

Also work from the **Pythagoras 12 Book**, more specifically the B-exercises from each section. (To perform the possible, you practice the impossible. ☺)

Use this “conversion” between the Mind Action Series textbook (New Edition) and Exam Aid book and the Pythagoras Book:

CHAPTER from TEXTBOOK:	CLASSIFICATION in EXAM AID BOOK:	CLASSIFICATION in PYTHAGORAS 12 BOOK:
Chapter 1: SEQUENCES AND SERIES	Number patterns Sequences and series: Arithmetic Sequences and series: Geometric	Patterns, Sequences and Series (Module 2)
Chapter 2: FUNCTIONS AND INVERSE FUNCTIONS	Inverse <u>Exponents and Surds*</u> <u>Equations and Inequalities*</u>	Exponential and Logarithmic Functions (Mod 1.1) Functions and their inversions (Mod 1.2)
Chapter 3: CUBIC POLYNOMIALS	Remainder and Factor Theorem	Remainder and Factor Theorems (Mod.1.3)
Chapter 4: DIFFERENTIAL CALCULUS	<u>Nature of roots*</u> Functions, Graphs Differentiation Mathematical Modelling	Differential Calculus (Mod 4)
Chapter 5: GENERAL TRIGONOMETRY	Identities Solve equations Graphs Measurement	Trigonometry (Mod 8.1)
Chapter 6: TRIGONOMETRY IN TRIANGLES	2-D 3-D	Trigonometry (Mod.8.2)
Chapter 7: ANALYTICAL GEOMETRY	Analytical Geometry (Also see “Geometry”)	Analytical Geometry (Mod 7)
Chapter 8: EUCLIDEAN GEOMETRY	Geometry	Euclidean Geometry (Mod 9)
Chapter 9: FINANCIAL MATHS	Compound interest, Annuities and bonds	Finance, Growth and Decay (Mod 3)

*These are sections that are NOT covered in the grade 12 Mind Action Series book, but were covered in grade 11.

ROSTER:

Day 1: Chapter 1: SEQUENCES AND SERIES

Day 2: Chapter 2: FUNCTIONS AND INVERSES

Day 3: Chapter 5: TRIGONOMETRY (and Chapter 6: TRIGONOMETRY in TRIANGLES)

Day 4: Chapter 7: ANALYTICAL GEOMETRY

Day 5: Chapter 8: EUCLIDEAN GEOMETRY

Day 6: Chapter 9: FINANCIAL MATHS

Day 7: Chapter 3: CUBIC POLINOMIALS

Day 8: Chapter 4: DIFFERENTIAL CALCULUS

For every chapter in the textbook, do the following three steps: (Spread the work load over one or two days – according to the roster.)

☞ **STEP 1:** Go through **the theory** of the Chapter before you do the sums.

STEP 2: Do some **examples** from each set of examples in the textbook, especially the last examples from each set. Do some of the exercises in the textbook of which you have the correct answers. The REVISION EXERCISES at the back of each chapter are the most important.

STEP 3: Do the corresponding exercises from the Examination Aid book and/or your green Pythagoras 12 Book. Make sure you can get to the right answers – the solutions are at the back of the book. Questions in the June exam can very easily come from these books.

☞ **Make sure that you do STEP 3!** (If these are the only sums that you do from a chapter, and you manage the sums, you have DONE WELL! 😊)

STEP 4: Work out at least one of the papers from the AnswerSeries book. It contains 3 papers with solutions. Do these papers on the day before you write exam.

There is LOTS of work to master. Be positive and resolute and make sure that you are well prepared when the exams start.

**N I N A
S N Y M A N**

Dr Maths
School of Mathematics

Drmaths.co.za

nsnyman@vodamail.co.za

082 745 4462