

Half yearly exam notification



<i>Course</i>	Year 11 Mathematics
<i>Task</i>	Half Yearly examination
<i>Date and time</i>	Monday 15 th May 1.50pm, Week 4, Term 2
<i>Time allowed</i>	90 minutes (5 minutes reading time)
<i>Weighting</i>	No contribution to yearly assessment mark

<i>Nature of task</i>	Written examination style task, NESA approved calculators allowed, NESA reference sheet will be provided. Section A - 20 multiple choice questions Section B - Extended response questions
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NOTE – 20 multiple choice questions in section A will be adapted from 30 multiple choice questions that will be provided to students 1 week prior to the exam on Monday 8th May. Answer but not full solutions will be provided.

<i>Topics and outcomes</i>	Basic Arithmetic and Algebra Equations and Inequations Real Functions <i>Outcomes - P2, P3, P4, P5</i>
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<i>Course text</i>	Grove M. (2010) Maths in Focus Mathematics Preliminary Course Mc Graw-Hill Education
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Topics content and text references

Basic Arithmetic and Algebra (Chapters 1 & 2)

Students can be asked to:

- Perform a variety of operations with fractions, decimals and percentages
- Change recurring decimals to fractions
- Approximate answers using decimal places and significant figures
- Use scientific notation
- Apply the properties of absolute value to evaluate or simplify an expression
- Perform the four operations with algebraic expressions
- Expand and simplify expressions involving binomial products
- Factorise algebraic expressions using common factors, grouping in pairs, difference of two squares, sum and difference of two quadratic trinomials, sum and difference of two cubes or any combination of these.
- Factorise an expression completely i.e. multiple factorisations
- Simplify algebraic fractions
- Simplify numerical and algebraic expressions involving indices or surds

Equations and Inequations (Chapter 3)

Students can be asked to:

- solve linear equations and inequations
- solve equations involving indices
- solve quadratic equations
- solve quadratic inequalities
- solve simultaneous equations
- solve equations arising from substitution into formulae
- determine restrictions on the solution of equations used to solve problems
- solve absolute value equations and inequations

(continued overleaf)

Real Functions (Chapter 5: 5.1-5.5, 5.7)

Students can be asked to:

- determine whether or not a given relation is a function
- use function notation
- sketch lines, parabolae, hyperbolae and exponential curves
- determine the domain and range of functions and relations (lines, parabolae, hyperbolae and exponential curves)
- determine whether a function is odd, even or neither
- use the geometric properties of odd and even functions

Preparation

- Write summary notes of the topics listed above
- Answer the 30 multiple choice questions provided
- Study the content listed above using the text references and other resources provided