



ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Mathematics ADVANCED
Topics	Financial Mathematics, Algebra and Indices, Numbers of Any Magnitude
Class Teacher	Ms Brown, Mrs Arnott
Head Teacher	Mrs Edwards
Year	9
Date Given	Week 2
Date Due	Week 4
Weighting	30%

Assessment Outline

1x SINGLE PERIOD Examination in the Yalmambirra Building

Topics assessed:

<u>Financial Mathematics</u>	<u>Expressions & Indices</u>	<u>Numbers of Any Magnitude</u>
-Converting to and from percentages -Writing a quantity as a percentage -Finding a percentage of a quantity -Percentage increase and decrease -Unitary Method -Percentage Profit and Loss -Calculating Salaries & Wages -Overtime (time-and-a-half & double time) -Commission, Piecework & Royalties -Annual Leave Loading -Taxable income and Income Tax -Medicare Levy -Net income -Simple Interest -Buying on Terms	-Algebra and expressions -Addition, Subtraction, Multiplication & Division of terms -Substitution -Expanding brackets -Factorising -Index Laws (multiply, divide, zero index, power of a power & negative indices with algebraic denominators) -Algebraic Fractions with Indices (add, subtract, multiply, divide) -Algebraic fractions with pronumerals in the denominator	-Prefixes -Precision of Measuring Instruments -Percentage Error -Significant Figures & Rounding -Scientific Notation -Ordering and estimating numbers in scientific notation and solving problems

Required equipment

- Black or Blue Pen or Pencil
- Eraser
- School Approved Calculator

Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both cases.

Plagiarism:

Plagiarism, the using of the work of others without acknowledgement, will incur serious penalties and may result in a zero award. Any cheating will also incur penalties.

**Failure to follow the above procedures may result in a zero award.
The policies and procedures that are outlined on the ROSA booklet will be followed regarding the non-completion of assessment tasks.**

Course Outcomes:

MAO-WM-01

develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly

MA5-FIN-C-01 solves financial problems involving simple interest, earning money and spending money

MA4-ALG-C-01

generalises number properties to operate with algebraic expressions including expansion and factorisation

MA4-IND-C-01

operates with primes and roots, positive-integer and zero indices involving numerical bases and establishes the relevant index laws

MA5-ALG-C-01

simplifies algebraic fractions with numerical denominators and expands algebraic expressions

MA5-IND-C-01

simplifies algebraic expressions involving positive-integer and zero indices, and establishes the meaning of negative indices for numerical bases

MA5-ALG-P-01

simplifies algebraic fractions involving indices, and expands and factorises algebraic expressions

MA5-MAG-C-01

solves measurement problems by using scientific notation to represent numbers and rounding to a given number of significant figures

Examination Structure

The examination will be separated into four sections:

Section 1 – Basic Understanding Grades D/E

This section will contain questions requiring students to demonstrate a basic knowledge of content and understanding of course concepts, applying skills and processes in some familiar contexts.

Section 2 - Sound Understanding Grades B/C

This section will contain questions requiring students to demonstrate sound knowledge of content and understanding of course concepts. Students will be required to solve routine problems of up to 3 steps in familiar and unfamiliar situations. They will apply some connections between concepts to attempt non-routine problems.

Section 3 – High Understanding Grade A

This section will contain questions requiring students to demonstrate extensive knowledge of content and understanding of course concepts and apply highly developed skills and processes in a range of contexts. Students will be required to make connections between concepts to solve problems in familiar and unfamiliar situations. They will use multiple connections between concepts to solve non routine problems.

Section 4 – Advanced Pathway Content

This section will contain questions on the Pathway content we have studied as a part of the Advanced Mathematics course.