

## Task 2: Half Yearly Examination

**Due Date:** Wednesday 29<sup>th</sup> May 2024 – P5 & 6

**Task Distributed:** 15th May 2024

**Unit:** Arithmetic and the Calculator, Computation with Integers and the Cartesian Plane, Algebraic Techniques, Fractions, Decimals and Percentages.


**Task Type:** Formal Examination

**Task Weighting:** 25%

**Outcomes:** MAO-WM-0, MA4-INT-C-01, MALS-POS-01, MA4-ALG-C-01, MA4-FRC-C-01

### Task Description

This exam will consist of two sections.

- **Section 1:** 10 multiple choice questions worth one mark each covering the units listed above.
- **Section 2:** A mixture of short and long response questions separated into topics worth one mark or more. This section will involve a number of literacy questions requiring you to write a short statement. These questions will be marked with the following symbol: 

### Key Areas of Learning:

<p><b>Arithmetic and the Calculator</b></p> <ul style="list-style-type: none"> <li>● Using the common calculator functions to evaluate numerical calculations</li> <li>● Use a calculator correctly for applying the order of operations</li> <li>● Determine all factors of a given whole number</li> </ul>	<p><b>Computation with Integers &amp; the Number Plane</b></p> <ul style="list-style-type: none"> <li>● Apply the associative, commutative and distributive laws to aid written computations</li> <li>● Compare, order, add and subtract integers</li> <li>● Carry out the four operations with rational numbers and integers</li> <li>● Plot points on the Cartesian Number Plane</li> <li>● Make interpretations on the Cartesian Number Plane</li> </ul>
<p><b>Fractions, Decimals &amp; Percentages</b></p> <ul style="list-style-type: none"> <li>● Recognise the 3 different types of fractions: proper, improper and mixed numerals</li> <li>● Convert between improper fractions and mixed numeral fractions</li> <li>● Identify and create equivalent fractions</li> <li>● Write a fraction in its simplest form</li> <li>● Place fractions on a number line</li> <li>● Calculate fractions of quantities</li> <li>● Perform operations with fractions including addition, subtraction, multiplication and division</li> <li>● Convert between fractions, decimals and Percentages</li> <li>● Recognise and round terminating and recurring decimals</li> </ul>	<p><b>Algebraic Techniques</b></p> <ul style="list-style-type: none"> <li>● Substitute numbers into algebraic expressions and evaluate the result</li> <li>● Rewrite an algebraic expression in its most simplified form</li> <li>● Multiply and divide algebraic terms</li> <li>● Identify which terms are ‘Like Terms’</li> <li>● Add and subtract ‘Like Terms’</li> <li>● Recognise equivalent algebraic expressions</li> <li>● Apply the order of operations (BODMAS) to evaluate algebraic expressions</li> <li>● Rewrite a written statement into an algebraic expression</li> </ul>

## NESA Glossary of Key Words

Understand the verb associated with the task. The verb will provide an understanding of the detail needed to successfully answer the question.

- **Calculate/Evaluate:** Determine the numerical value
- **Show:** Use sequential working out to prove an answer to be true
- **Describe:** provide characteristics and features
- **Explain:** Justify a given answer making links to a mathematical idea or strategy
- **Identify:** recognise and name

Check the NESA Glossary of Key Words for further guidance

<https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/hsc/hsc-student-guide/glossary-keywords>

### Details of Submission

For successful completion of this examination you must have the following equipment:

- Board approved calculator
- Pencil, eraser and ruler for graphs and diagrams
- Blue or black pen

Students are NOT permitted to bring notes or any electronic device into the exam.

If you are absent from the examination, you must contact the school on the day and follow school assessment and illness/misadventure policies and procedures. A valid attempt at all questions is required.

## Teacher Feedback and Student Self-Reflection

- The task will typically be returned to students within 14 days of the due date.
- At this time feedback including information on how to improve will be provided through worked solutions and a literacy marking rubric (see attached).
- Students can clarify or seek further feedback by speaking with their teacher or the assessment marker.
- You will also receive feedback on your literacy performance based on the criteria in the school's literacy marking rubric. The marks achieved for literacy will account for between 10% – 20% of the maximum task value.
- Upon return of the task, students will also be expected to complete a self-reflection.

## How does this link to my learning?

- This task will be used by your teachers to assess your knowledge and understanding of the outcomes listed that you have been studying in class this semester.
- The marks achieved in this exam will go towards your semester 1 report and may determine your class in any future class placements.
- This task will draw together the above outcomes and assess your ability to apply a range of mathematical skills and techniques that you have covered in class.

## Assessment Procedures

All students should be fully aware of the School Assessment Procedures for their year group. These were provided at the beginning of the school year and are available off the school website under the Learning Tab for each year group.

## The GTHS Mathematics Literacy Criteria

Literacy Outcomes	Elementary achievement You have:	Limited achievement You have:	Satisfactory achievement You have:	High achievement You have:	Outstanding achievement You have:
<b>Vocabulary</b> <i>Uses technical vocabulary to explain concepts and/or range of precise and appropriate words for effect</i>	Very limited response. Few content words used.	Only simple words are used.	Some precise and technical words are used.	Sustained use of precise and technical words.	Sustained, consistent and fluent use of precise and technical words.
	0	1	2	3	4
<b>Punctuation</b> <i>Use of correct and appropriate sentence and other punctuation for effect, and to aid in reading of the text</i>	No evidence of correct sentence punctuation.	Sentence punctuation is correctly used in at least one place - <i>one sentence is punctuated correctly.</i>	Some correct sentence level punctuation (at least 50%). May attempt other punctuation where it is required.	Mostly correct sentence level punctuation (80%) and at least two correct examples of other punctuation.	Writing contains accurate use of all applicable punctuation.
	0	1	2	3	4
<b>Sentences &amp; Cohesion</b> <i>The intentional construction of a variety of sentences to match purpose and audience, and the control of multiple sentence threads across the whole text.</i>	No clear evidence of sentences: a list of words OR text fragments.	At least one sentence is used correctly. Some meaning can be construed from the text.	Some correct formation of simple sentences, but may attempt more complex structures.	Most sentences are correct, including compound sentences.	All sentences are correct, effective and controlled, and include evidence of sophisticated structures)
	0	1	2	3	4
	Level of response is well below syllabus expectation	Level of response is below syllabus expectation	Level of response is equivalent to syllabus expectation	Level of response is above syllabus expectation	Level of response is well above syllabus expectation