

Task 1: In-Class Test

Due Date: Friday 4th April

Task Distributed: 18th March 2025

Unit: Arithmetic and the Calculator, Computation with Integers, The Number Plane, Algebraic Techniques


Task Type: In Class Test

Task Weighting: 15%

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

Task Description

The duration of this exam is 40 minutes and 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>Arithmetic and the Calculator</p> <ul style="list-style-type: none"> • Identify common functions on the calculator • Use these common calculator functions to evaluate numerical calculations 	<p>The Number Plane</p> <ul style="list-style-type: none"> • Plot, identify and label points on the Cartesian Number Plane • Solve a variety of problems using Cartesian Number Plane skills
<p>Algebraic Techniques</p> <ul style="list-style-type: none"> • Define the algebraic terminology and notation including pronumeral and variable. • Define what algebraic like terms are and how we operate with them. • Use pronumerals to create algebraic expressions that involve multiple variables. • Simplify algebraic expressions involving the four operations (+, -, ×, ÷) • Solve problems by breaking them down into an algebraic expressions • Apply the laws and properties of arithmetic in algebra to simplify expressions <p>Evaluate algebraic expressions using substitution of given values</p>	<p>Computation with Integers</p> <ul style="list-style-type: none"> • Compare and order integers in a row and on the number line • Understand and use notation such as greater than or less than to compare integers • Carry out the four operations with number sentences involving integers • Solve a range of problems involving integers • Apply the associative, commutative and distributive laws to aid written computations

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:** get the numerical value
- **Compare:** make a determination which value best meets the given criteria and explain why
- **Describe:** provide characteristics and features of a mathematical concept
- **Evaluate:** find the numerical value of a given expression
- **Explain:** provide why and/or how a solution exists or is valid
- **Identify:** locate, recognise and/or name the given object or value
- **Solve:** use problem-solving skills to identify a valid solution

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 Rubric

Literacy Outcomes	Elementary achievement You have:	Limited achievement You have:	Satisfactory achievement You have:	High achievement You have:	Outstanding achievement You have:
<p style="text-align: center;">Vocabulary <i>Uses technical vocabulary to explain concepts and/or range of precise and appropriate words for effect</i></p>	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
<p style="text-align: center;">Punctuation <i>Use of correct and appropriate sentence and other punctuation for effect, and to aid in reading of the text</i></p>	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
<p style="text-align: center;">Sentences & Cohesion <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></p>	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