



Year 8 Mathematics
Task 4: In Class Test
Due Date: Tuesday 9th of September (Week 8B)

Task Distributed: 26th August 2024

Unit: Pythagoras' Theorem, Area and Volume, Indices

Task Type: In-class Test


Task Weighting: 15 %

Outcomes: MAO-WM-01, MA4-PYT-C-01, MAO-WM-01, MA4-ARE-C-01, MA4-VOL-C-01, MAO-WM-01, MA4-IND-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 a range of 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: 

Pythagoras' Theorem	Area and Volume	Indices
<ul style="list-style-type: none">• Find the length of hypotenuse• Find the length of shorter sides• Solving real world problems	<ul style="list-style-type: none">• Find the area of quadrilaterals• Calculate the area of composite shapes• Convert between units of area• Find the area of circles• Find the volume of prisms and cylinders• Convert between Volume and Capacity• Calculate the capacity of prisms and cylinders	<ul style="list-style-type: none">• Solve problems using index notation• Apply index laws to evaluate expressions with numerical and algebraic bases• Match the algebraic expression to its simplified solution• Square root manipulation• Cube and cube root• Prime factorisation decomposition

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** - Provide a numerical answer
- **Convert** – Change the format of a number involving specific units
- **Evaluate** - Make a judgement based on criteria; determine the value of
- **Identify** - Recognise and name
- **Prove / Show** - Provide all algebraic steps and working in a logical sequence
- **Simplify** - Write an expression in its simplest form
- **Solve** - Use algebraic techniques to find a solution

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

To successfully complete this assessment task, 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 devices into the exam.

If you are absent on the day of the exam, you must contact the school at your earliest convenience and follow the school's assessment illness/misadventure policies and procedures.

Students must make a genuine attempt at all questions.

Teacher Feedback and Student Self-Reflection

- The task will typically be returned to students within 14 Days of the test date.
- At this time feedback including information on how to improve will be provided through solutions.
- Students can clarify or seek further feedback by speaking with their teacher.
- 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 in class.

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.
- This task will also assess your ability to apply a range of mathematical skills and techniques relevant to the listed topics.
- The marks achieved in this exam will contribute to your semester 2 report and may determine your class in any future class placements.

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:
Vocabulary <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
Punctuation <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
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>	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