

Task 2: Half Yearly Exam

Due Date: Friday 30 May 2025

Task Distributed: 13th May 2025

Unit: Algebraic Techniques, Fractions, Decimals & Percentages, Circle Length, Equations

Task Type: Formal Examination

Task Weighting: 25%

Outcomes: MAO-WM-01, MA4-ALG-C-01, MA4-FRC-C-01, MA4-LEN-C-01, MA4-EQU-C-01

Task Description

This exam will be **60 minutes** in duration and will consist of two sections:

- **Section 1-** 10 multiple choice questions, worth 1 mark each. Questions will cover a range of the content listed in the Areas of Learning and will increase in difficulty. They are to be answered on a separate multiple-choice answer sheet attached to the back of your exam.
- **Section 2-** A mixture of short and long response questions separated into topics, worth 1 mark or more. The questions in each topic will build in difficulty. This section will involve a number of literacy questions, requiring you to write a short statement in full sentences, to fully answer the question. All answers are to be written in the space provided below each question.

Literacy questions will be marked with the following symbol: 

ALGEBRAIC TECHNIQUES

- Collect like terms.
- Expand algebraic expressions.
- Factorise algebraic expressions.

FRACTIONS, DECIMALS & PERCENTAGES

- Identify, define and approximate irrational numbers.
- Convert between fractions, decimals and percentages.
- Calculate percentage increases/decreases.
- Use the unitary method
- Solve problems involving GST, Profit and Loss

EQUATIONS

- Solve one and two step equations.
- Verify solutions by substituting.
- Solve word problems, including those involving consecutive numbers.
- Solve two step quadratic equations.
- Understand why quadratics have two solutions.

CIRCLES

- Identifying features of a circle.
- Calculating the circumference of circles.
- Calculate the length of an arc.
- Calculate the Perimeter of a sector of a circle.

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:** Find the numerical value of
- **Describe:** provide characteristics and features
- **Explain:** relate cause and effect; provide why and/or how
- **Identify:** recognise and name
- **Match:** pair a name and concept together

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 bring the following equipment.

- Board approved calculator
- Blue or black pen,
- Pencils and eraser for graphs
- A ruler

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 in class, when the tests are returned.

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 term.
- 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.