

Year 8 Mathematics

Assessment Task 2 – 2025

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| **TOPIC**: Equations and Pythagoras | **MARKS:** 40 |
| **SUBMISSION REQUIREMENTS:** Due Term 2 Friday Week 5 – 30th May 20258MATB, 8MATC, 8MATG, 8MATM, 8MATW, 8MATY |
| **OUTCOMES TO BE ASSESSED:*** + - * **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.**
			* **MA4-EQU-C-01** **Solves** linear equations of up to 2 steps and quadratic equations of the form $ax^{2}=c.$
			* **MA4-PYT-C-01 Applies** Pythagoras’ theorem to **solve** problems in various contexts.
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| **Directional Verbs:** Develop – process of building on existing knowledge.Explore – to investigate a mathematical concept.Connect – process of linking mathematical concepts.Choose - selecting a specific option or method from a range of possibilities.Apply - use, utilise, employ in a particular situation.Solve – find an answer to.Communicate – express mathematical ideas effectively.Coherently – present mathematical ideas and reasoning in a logical and consistent manner.Clearly – present mathematical ideas in an understandable way. |
| **TASK DESCRIPTION:**Test consisting of:Section A – Equations (3 Questions totalling 20 marks)Section B – Equations (8 Questions totalling 20 marks)The test will be completed in class on the assigned date set and will be collected at the end of the lesson. **Students may bring a calculator to use during the task** Equipment required: **Calculator - Ruler - Pen - Pencil - Eraser** |
| **ASSESSMENT CRITERIA:**You will be marked on your ability to answer the questions correctly. Show relevant mathematical working, reasoning and/or calculations. You are encouraged to revise the following concepts learnt in class.

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| **Equations** | **Pythagoras** |
| * Pythagoras Theorem Formula
* One-Step and Two Step Linear Equations
* Linear Equations Involving Fractions.
* Linear Equations with Pronumerals on Both Sides
* Linear Equations with Brackets
* Simple Quadratic Equations
* Equations Involving Substitution
* Formulas and Relationship
* Application – Worded Problems
 | * Identify Hypotenuse of a Right-Angled Triangle
* Calculating Hypotenuse of a Right-Angled Triangle
* Calculating Shorter Side of a Right – Angled Triangle
* Pythagorean Triad
* Converse of Pythagoras Theorem
* Calculating Perimeter by Applying Pythagoras Theorem
* Worded Problem including sketching diagram
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