

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 2025  8MATB, 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       * **MA4-PYT-C-01 Applies** Pythagoras’ theorem to **solve** problems in various contexts. | |
| **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.   |  |  | | --- | --- | | **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 | | |