

Year 10 – Stage 5.3 Mathematics

Assessment Task 1 – 2024

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| **TOPICS**: Financial Mathematics and Surface Area & Volume | **MARKS:** 40 |
| **DATE OF TASK:** Week 9, Thursday 28th March 2024 , period 2 | **WEIGHTING:** 30% |
| **OUTCOMES TO BE ASSESSED:**  MA5.2-4NA Solves financial problems, including compound interest  MA5.3-13MG Applies formulas to find the surface areas of pyramids, cones, spheres and other solids  MA5.3-14MG Applies formulas to find the volumes of pyramids, cones, spheres and other solids  MA5.3-1WM Uses and interprets formal definitions and generalisations when explaining solutions  MA5.3-2WM Generalises mathematical ideas and techniques to analyse and solve problems | |
| **DIRECTIONAL VERBS:**  Calculate - to determine from given facts, figures or information  Find - to obtain by effort | |
| **TASK DETAILS/INSTRUCTIONS:**   * An in-class test, comprised of short-answer responses. * Write in blue or black pen. * Show all necessary working for each question. * Untidy or illegible work will not be marked. * A calculator, meeting NESA criteria, should be used. | |
| **ASSESSMENT TASK PREPARATION:** You are encouraged to revise the following topics and concepts –  Topic 1: Financial Mathematics (gross pay, net pay, deductions, income tax, simple interest,  compound interest, term payments, depreciation)  Topic 2: Surface Area & Volume (surface area and volume of: prisms, cylinders, pyramids, cones,  spheres and composite solids) | |