Gorokan High School
Year 10 Assessment Schedule 2024
Mathematics 5.1/5.2/5.3

| Task number | Task 1 | Task 2 | Task 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Name of Task | Semester 1 Exam | Investigative Task | Semester 2 Examination |  |
| Task Due | Term 2, Week 4 | Term 3, Week 9 | Term 4. Week 5 |  |
| Outcomes assessed | MA5.1-5NA <br> MA5.1-4NA <br> MA5.2-6NA <br> MA5.2-7NA <br> MA5.3-5NA <br> MA5.3-6NA <br> MA5.1/2/3-2WM <br> MA5.1/2/3-3WM | MA5.2-16SP <br> MA5.3-19SP <br> MA5.1/2/3-1WM <br> MA5.1/2/3-2WM <br> MA5.1/2/3-3WM | MA5.2-4NA MA5.1-6NA MA5.2-9NA MA5.3-8NA MA5.2-11MG MA5.3-13MG MA5.1/2/3-2WM MA5.1/2/3-3WM |  |
| Components |  |  |  | Task Weighting \% |
| Problem Solving | 17.5 | 15 | 17.5 | 50 |
| Reasoning | 8.75 | 7.5 | 8.75 | 25 |
| Communication | 8.75 | 7.5 | 8.75 | 25 |
| Total \% | 35 | 30 | 35 | 100 |

## Course Outcomes:

MA5.1-1 WM
MA5.1-2WM
MA5.1-3WM
MA5.1-4NA
MA5.1-5NA
MA5.1-6NA
MA5.1-8MG
MA5.1-9MG
MA5.1-10MG
MA5.1-13SP
MA5.2-1WM
MA5.2-2WM
MA5.2-3WM
MA5.2-6NA
MA5.2-7NA
MA5.2-8NA
MA5.2-9NA
MA5.2-11MG
MA5.2-12MG
MA5.2.13MG
MA5.2-17SP
uses appropriate terminology, diagrams and symbols in mathematical contexts selects and uses appropriate strategies to solve problems provides reasoning to support conclusions that are appropriate to the context solves financial problems involving earning, spending and investing money operates with algebraic expressions involving positive-integer and zero indices, and establishes the meaning of negative indices for numerical bases determines the midpoint, gradient and length of an interval, and graphs linear relationships calculates the areas of composite shapes, and the surface areas of rectangular and triangular prisms interprets very small and very large units of measurement, uses scientific notation, and rounds to significant figures applies trigonometry, given diagrams, to solve problems, including problems involving angles of elevation and depression calculates relative frequencies to estimate probabilities of simple and compound events
selects appropriate notations and conventions to communicate mathematical ideas and solutions
interprets mathematical or real-life situations, systematically applying appropriate strategies to solve problems
constructs arguments to prove and justify results
simplifies algebraic fractions, and expands and factorises quadratic expressions
applies index laws to operate with algebraic expressions involving integer indices
solves linear and simple quadratic equations, linear inequalities and linear simultaneous equations, using analytical and graphical techniques
uses the gradient-intercept form to interpret and graph linear relationships
calculate the surface areas of right prisms, cylinders and related composite solids
applies formulas to calculate the volumes of composite solids composed of right prisms and cylinders
applies trigonometry to solve problems, including problems involving bearings
describes and calculates probabilities in multi-step chance experiments

MA5.3-1WM
MA5.3-2WM
MA5.3-3WM
MA5.3-5NA
MA5.3-6NA
MA5.3-14MG
MA5.3-15MG
uses and interprets formal definitions and generalisations when explaining solutions and/or conjectures generalises mathematical ideas and techniques to analyse and solve problems efficiently uses deductive reasoning in presenting arguments and formal proofs
selects and applies appropriate algebraic techniques to operate with algebraic expressions
performs operations with surds and indices
calculates the angle sum of any polygon and uses minimum conditions to prove triangles are congruent or similar
Applies Pythagoras' theorem, trigonometric relationships, the sine rule, the cosine rule and area rule to solve problems, including problems involving three dimensions

