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|  | **Western Mathematics**  **2013**  **Year 10**  **Yearly Examinations**  **Mathematics and Advanced Maths Courses**  **Mapping Grids** |
|  | The two exams have 50% of their content in common, which allows for comparision between students of a similar ability in the different courses, for allocation of grades etc. The common sections are highlighted in yellow. All of the short answer, non-calculator section is common, and the last 25 MC questions in the Mathematics paper are common with the first 25 MC questions in the Advanced Maths Paper (ie question 51 on the Mathematics paper is the same as question 26 on the Advanced paper).  Some schools do not persist with non-calculator sections after the NAPLAN stages, but we feel it is still worthwhile. If you prefer, just call the first section the Short Answer Section.  All questions are in cells in a table, so can easily be substituted with another from the Assessment Bank if the topic has not been covered.  The questions in the Short Answer and MC are generally grouped together according to the strands.  Any feedback would be appreciated, as it will help with future papers.  All the best    Garry Thorn  WME |

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| **Section 1**  Short Answer  Non Calculator Section. | | |
|  | **Year 10 Maths Course** | **Year 10 Advanced Course** |
|  | Whole numbers | Whole numbers |
|  | Rational numbers | Rational numbers |
|  | Rational numbers | Rational numbers |
|  | Spending | Spending |
|  | Ratio and Rates | Ratio and Rates |
|  | Basic Geometry Angles | Basic Geometry Angles |
|  | Basic Geometry Triangles | Basic Geometry Triangles |
|  | Basic Geometry Polygons | Basic Geometry Polygons |
|  | Transformation Geometry | Transformation Geometry |
|  | Similarity -Pythagoras | Similarity -Pythagoras |
|  | Basic Measurement Units | Basic Measurement Units |
|  | Perimeter | Perimeter |
|  | Area | Area |
|  | Pythagoras’ Theorem | Pythagoras’ Theorem |
|  | Volume of Prisms | Volume of Prisms |
|  | Basic Algebraic Techniques | Basic Algebraic Techniques |
|  | Basic Algebraic Techniques | Basic Algebraic Techniques |
|  | Indices | Indices |
|  | Coordinate Geometry | Coordinate Geometry |
|  | Equations and Inequalities | Equations and Inequalities |
|  | Basic Probability | Basic Probability |
|  | Collecting and Representing Data | Collecting and Representing Data |
|  | Collecting and Representing Data | Collecting and Representing Data |
|  | Measures of Central Tendency | Measures of Central Tendency |
|  | Measures of Spread | Measures of Spread |

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| **Section 2**  **Part A**  Multiple Choice Section. | | |
|  | **Year 10 Maths Course** | **Year 10 Advanced Course** |
|  | Rational numbers | Earning |
|  | Ratio and rates | Spending |
|  | Earning | Compound Interest |
|  | Spending | Depreciation |
|  | Basic Geometry Angles | Taxation |
|  | Basic Geometry -Transformations | Basic Geometry Angles |
|  | Basic Geometry -Triangles | Basic Geometry Triangles |
|  | Basic Geometry -Quadrilaterals | Basic Geometry Congruence |
|  | Similarity | Similarity |
|  | Congruence | Similarity |
|  | Compound Area | Volume of Cone |
|  | Volume of Prisms | Surface Area of Prisms |
|  | Pythagoras’ Theorem | Volume of Sphere |
|  | Right Triangle Trigonometry | Right Triangle Trigonometry |
|  | Volume of Pyramid | Right Triangle Trigonometry |
|  | Basic Algebraic Techniques | Factors |
|  | Coordinate Geometry | Coordinate Geometry |
|  | Indices | Non Linear Graphs |
|  | Equations and Inequalities | Indices |
|  | Non Linear Graphs | Equations and Inequalities |
|  | Basic Probability | Basic Probability |
|  | Collecting Data | Representing Data - |
|  | Representing Data | Measures of Central Tendency – Grouped Frequency Table |
|  | Measures of Central Tendency Frequency Histogram | Measures of Spread – Grouped Frequency Table |
|  | Measures of Spread – Interquartile Range | Central Tendency – Comparing sets of Data. BB Stem & Leaf |
|  | Earning | Credit Card Interest |
|  | Spending | Surds and Indices |
|  | Compound Interest | Surds |
|  | Depreciation | Basic Geometry Triangles |
|  | Taxation | Basic Geometry Polygons |
|  | Basic Geometry Angles | Congruence |
|  | Basic Geometry Triangles | Similarity |
|  | Basic Geometry Congruence | Surface Area of Pyramids. |
|  | Similarity | Cosine Rule - Angle |
|  | Similarity | Sine Rule – Side |
|  | Volume of Cone | Coordinate Geometry |
|  | Surface Area of Prisms | Binomial Products |
|  | Volume of Sphere | Binomial Factors |
|  | Right Triangle Trigonometry | Simultaneous Equations |
|  | Right Triangle Trigonometry | Simultaneous Equations |
|  | Factors | Graphs of Physical Phenomena |
|  | Coordinate Geometry | Quadratic Equations |
|  | Non Linear Graphs | Quadratic Equations |
|  | Indices | Non Linear Graphs |
|  | Equations and Inequalities | Distance Time Graphs. |
|  | Basic Probability | Probability – Two way table |
|  | Basic Probability | Probability – Venn Diagram |
|  | Mean – Grouped Frequency Table | Shape of distribution |
|  | Comparing measures – Grouped Frequency Table | Measures of Spread – SD |
|  | Measures of Spread – Comparing sets of Data. BB Stem & Leaf | Box Plots |

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| **Section 2**  **Part B**  Longer Answer Section. | | | | |
|  | **Year 10 Maths Course** | | **Year 10 Advanced Course** | |
|  | Financial Maths (N) | 3 | Surds (N) | 3 |
|  | Linear Equation (A) | 2 | Similarity (G) | 3 |
|  | Surface Area of Prism and Volume of a Pyramid(M) | 2 | Surface Area of a Pyramid, and Volume of a Sphere.(M) | 3 |
|  | Right Trigonometry (M) | 3 | Algebraic Fraction with Binomial Factors (A) | 2 |
|  | Probability (P) | 3 | Congruence and Deductive Reasoning (G) | 2 |
|  | Data: Measures of Central Tendency and Spread. (D) | 3 | Non Right Triangle Trig (M)  Sine rule – angle  Cos Rule – side | 3 |
|  | Coordinate Geometry (A) | 2 | Coordinate Geometry (A) | 3 |
|  | Congruence (G) | 2 | Quadratic Equations (A) | 2 |
|  | Similarity (G) | 3 | Further Probability – Counting Techniques (D) | 2 |
|  | Non-linear Graphs (A) | 2 | Data | 2 |