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|  | **Western Mathematics**  **2014 Year 10**  **Half Yearly Examination**  **Mathematics Courses**  **Mapping Grids** |
|  | The Half Yearly Exams are denoted as the Mathematics and Advanced Mathematics courses. These correspond to the Core Year 9 – 10 course for the Australian Curriculum and the 10A Course which has additional topics. This corresponds basically to the 5.2 and 5.3 courses in NSW.  The Mathematics and Advanced Mathematics exams are both 2 hour exams of 100 marks and 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. All 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.  Some schools do not persist with non-calculator sections after the NAPLAN stages, but we feel it is still worthwhile. If you don’t want non-calculator, just change the name of the first section to Short Answer Section.  We anticipate that many schools will not be running full 2 hour exams, but due to the different content covered at the time of the half yearlys, you should be able to take out the topics you don’t want to include and still have substantial exams. If you want to add content, it can be taken from the Assessment Bank topic tests.  Any feedback would be appreciated, as it will help with future papers, in particular for the Year 10 Yearly exam, which will be of a similar format.  All the best  Garry Thorn  WME |

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|  | **Year 10 Maths Course** | **Year 10 Advanced Course** |
|  | **Short Answer (Common)** | **Short Answer (Common)** |
|  | Order of Operations | Order of Operations |
|  | Rational numbers | Rational numbers |
|  | Rational numbers | Rational numbers |
|  | Earning | Earning |
|  | Financial Maths | Financial Maths |
|  | Financial Maths | Financial Maths |
|  | Ratio and Rates | Ratio and Rates |
|  | Basic Geometry Angles | Basic Geometry Angles |
|  | Basic Geometry Triangles | Basic Geometry Triangles |
|  | Basic Geometry Polygons | Basic Geometry Polygons |
|  | Basic Measurement Units | Basic Measurement Units |
|  | Perimeter | Perimeter |
|  | Area | Area |
|  | Volume of Prisms | Volume of Prisms |
|  | Pythagoras’ Theorem | Pythagoras’ Theorem |
|  | Basic Algebraic Techniques | Basic Algebraic Techniques |
|  | Basic Algebraic Techniques | Basic Algebraic Techniques |
|  | Basic Algebraic Techniques | Basic Algebraic Techniques |
|  | Coordinate Geometry | Coordinate Geometry |
|  | Indices | Indices |
|  | 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 |
|  | **Multiple Choice** | **Multiple Choice** |
|  | Rational numbers | Rational Numbers |
|  | Rational numbers | Financial Maths |
|  | Ratio and rates | Time Payments |
|  | Financial Maths | Compound Interest |
|  | Financial Maths | Ratio and Rates |
|  | Basic Geometry Angles | Basic Geometry Triangles |
|  | Basic Geometry Shapes | Basic Geometry Congruence |
|  | Basic Geometry Transformations | Basic Geometry Polygons |
|  | Basic Geometry Triangles | Basic Geometry Symmetry |
|  | Basic Geometry Polygons | Volume of Prism |
|  | Area | Surface Area of Prisms |
|  | Compound Area | Surface Area of Cylinder |
|  | Volume of Prisms | Right Triangle Trigonometry |
|  | Pythagoras’ Theorem | Right Triangle Trigonometry |
|  | Right Triangle Trigonometry | Right Triangle Trigonometry |
|  | Basic Algebraic Techniques | Factors |
|  | Basic Algebraic Techniques | Linear Function |
|  | Coordinate Geometry | Coordinate Geometry |
|  | Indices | Algebraic Fractions |
|  | Equations and Inequalities | Equations and Inequalities |
|  | Collecting Data | Representing Data reading table |
|  | Representing Data | Measures of Central Tendency - S & L |
|  | Measures of Central Tendency  Frequency Histogram | Measures of Spread – Quartiles |
|  | Measures of Central Tendency  Stem and Leaf | Representing Data – Skew /shape |
|  | Measures of Spread – Quartiles | Central Tendency – Comparing mean median etc |
|  | Rational Numbers | Compound Interest |
|  | Financial Maths | Depreciation |
|  | Time Payments | Indices |
|  | Compound Interest | Surds |
|  | Ratio and Rates | Surds |
|  | Basic Geometry Triangles | Basic Geometry Triangles |
|  | Basic Geometry Congruence | Basic Geometry Polygons |
|  | Basic Geometry Polygons | Volume of Cone. |
|  | Basic Geometry Symmetry | Right Triangle Trigonometry |
|  | Volume of Prism | Volume of a Sphere. |
|  | Surface Area of Prisms | Surface Area of a Pyramid |
|  | Surface Area of Cylinder | Binomial Products |
|  | Right Triangle Trigonometry | Binomial Factors |
|  | Right Triangle Trigonometry | Binomial Factors |
|  | Right Triangle Trigonometry | Simultaneous Equations |
|  | Factors | Graphs of Physical Phenomena |
|  | Linear Function | Quadratic Equations |
|  | Coordinate Geometry | Quadratic Equations |
|  | Algebraic Fractions | Non Linear Graphs |
|  | Equations and Inequalities | Non Linear Graphs |
|  | Representing Data reading table | Basic Probability |
|  | Measures of Central Tendency - S & L | Basic Probability |
|  | Measures of Spread – Quartiles | Box Plots - shape of distribution |
|  | Representing Data – Skew /shape | Measures of Spread – Interquartile Range |
|  | Central Tendency – Comparing mean median etc | Measures of Spread – Standard Deviation |

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|  | **Longer Answer Questions** | | **Longer Answer Questions** | |
|  | Financial Maths (N) | 3 | Surds (N) | 3 |
|  | Geometry (G) | 3 | Surface Area and Volume of Prisms, Cylinders, Pyramids, Cones and Spheres.(M) | 3 |
|  | Surface Area and Volume of Prisms and Cylinder (M) | 3 | Right Triangle Trigonometry (M) | 3 |
|  | Right Trigonometry (M) | 4 | Compound Interest and Depreciation (N) | 2 |
|  | Basic Probability (P) | 2 | Binomial Products and Factors (A) | 4 |
|  | Data: Measures of Central Tendency and Spread. (D) | 3 | Quadratic Equations (A) | 3 |
|  | Algebraic Fractions and Equations (A) | 4 | Non Linear Graphs (A) | 4 |
|  | Coordinate Geometry (A) | 3 | Data: Measures of Central Tendency and Spread. (D) | 3 |