

STUDY GUIDE

Year 10A Mathematics

TERM 4

Assessment

A task Mental computation End of Term Test 7th week of Term Last week of Term Last week of Term

| Chapter | Strand Sub-Strand | Content Description |
|-----------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coordinate Geometry Chapter 16 (2 weeks) | Number and Algebra Linear & Non-linear Relationships | Solve problems involving parallel and perpendicular lines. Explore the connection between algebraic and graphical representations of relations such as simple quadratics and circles using digital technology as appropriate. |
| Geometric Reasoning Chapter 17 (2 weeks) | Measurement & Geometry Geometric Reasoning | ★ Formulate proofs involving congruent triangles and angle properties. ★ Apply logical reasoning, including the use of congruence and similarity, to proofs and numerical exercises involving plane shapes. ★ Prove and apply angle and chord properties of circles. |
| Statistics 2 Chapter 18 (2 weeks) | Statistics & Probability Data Representation & Interpretation | Use scatter plots to investigate and comment on relationships between two numerical variables. Investigate and describe bivariate numerical data where the independent variable is time. Evaluate statistical reports in the media and other places by linking claims to displays, statistics and representative data. Use information technologies to investigate bivariate numerical data sets. Where appropriate use a straight line to describe the relationship allowing for variation. |
| Trigonometry 2 Chapter 19 (2 weeks) | Measurement & Geometry Pythagoras & Trigonometry | Establish the sine, cosine and area rules for any triangle and solve related problems. Use the unit circle to define trigonometric functions, and graph them with and without the use of digital technologies. Solve simple trigonometric equations. Apply Pythagoras' theorem and trigonometry to solving three-dimensional problems in right-angled triangles. |
| Review Chapter 20 (2 weeks) | All of above | All of above |