## Varsity College <br> Year 8 Mathematics - Semester 1, 2024

| Week | Date | Topics | Assessment |
| :---: | :---: | :---: | :---: |
| 1 | $\begin{aligned} & \text { 22-26 January } \\ & \text { O-Week } \\ & \text { Australia Day PH Fri } \end{aligned}$ | - O Week activities <br> - Introduction to unit |  |
| 2 | 29 Jan-2 Feb | Number <br> - Use mental strategies and algorithms to do addition, subtraction, multiplication and division with whole numbers. <br> - Use the 4 operations with positive and negative integers <br> - Use order of operations to solve problems with integers |  |
| 3 | 5-9 February Swimming Carnival - Thurs | Percentages <br> - Convert decimals and fractions to percentages <br> - Calculate the percentage of a quantity <br> - Use percentages to increase and decrease quantities |  |
| 4 | 12-16 February | - Apply percentages to financial contexts involving mark up and discount <br> - Apply percentages to financial contexts involving the Goods and Services Tax (GST) <br> - Apply percentages to financial contexts involving simple interest |  |
| 5 | 19-23 February | Congruence <br> - Identify congruent shapes and the corresponding parts <br> - Investigate the conditions for congruence to prove two triangles are congruent |  |
| 6 | $\underset{\text { GC24-Wednesday }}{\text { 26 Feb }}$ | - Recall the geometric properties and rules between parallel lines and transversals <br> - Recall properties of quadrilaterals related to side lengths, parallel sides, angles, diagonals and symmetry <br> - Establish the properties of quadrilaterals using congruent triangles and geometric reasoning |  |
| 7 | 4-8 March | - Revision |  |
| 8 | 11-15 March | - Exam | EXAM Lesson 2 |
| 9 | 18-22 March GC24 - Thursday | Algebra <br> - Recall the language of algebra <br> - Create algebraic expressions to represent scenarios <br> - Simplify algebraic expressions involving addition and subtraction |  |
| 10 | 25-29 March Good Friday PH | - Simplify algebraic expressions involving multiplication and division <br> - Simplify algebraic expressions involving a combination of mathematical operations |  |
| School holidays: Friday March 29 - Sunday April 14 |  |  |  |

## Term 2, 2024

| Week | Date | Topics | Assessment |
| :---: | :---: | :---: | :---: |
| 1 | $\begin{aligned} & \text { 15-19 April } \\ & \text { Cross Country - Wed } \end{aligned}$ | Algebra Continued <br> - Recap simplifying algebraic expressions <br> - Apply Distributive Law to expand algebraic expressions <br> - Factorise algebraic expressions and demonstrate the relationship between expanding and factorising |  |
| 2 | $\begin{array}{\|l\|} \hline \text { 22-26 April } \\ \text { GCc24- - ursay } \\ \text { Anzac Day Ph } \end{array}$ | Index Laws <br> - Use expanded form to establish the connection to index form and apply to index laws <br> - Apply index laws individually and in combination using integers and variables |  |
| 3 | 29 Apr-3 May | - Apply index laws individually and in combination using integers and variables continued |  |
| 4 | $\begin{aligned} & \text { 6-10 May } \\ & \text { Labour Day PH - Mon } \end{aligned}$ | Pythagoras' Theorem <br> - Investigate Pythagoras' Theorem and the relationship between the squares of side lengths <br> - Identify the sides of a right-angled triangle in relation to Pythagoras' Theorem |  |
| 5 | 13-17 May | - Use Pythagoras' Theorem to calculate the length of the hypotenuse <br> - Use Pythagoras' Theorem to calculate the length of the shorter sides |  |
| 6 | 20-24 May | - Apply Pythagoras' Theorem to practical problems <br> - Revision |  |
| 7 | 27-31 May | - Exam | EXAM Lesson 2 |
| 8 | 3-7 June | Ratios and Rates <br> - Recall determining and simplifying ratios <br> - Calculate average rates <br> - Apply rates to solve problems involving converting between different units |  |
| 9 | $\begin{aligned} & \text { 10-14 June } \\ & \text { GC24-Wednesday } \end{aligned}$ | - Apply rates to calculate average speed, distance or time including conversion between different units <br> Time <br> - Convert between 12 -hour and 24 -hour time |  |
| 10 | $\begin{array}{\|l\|l\|} \hline \begin{array}{l} \text { Athleticis Carnival - Thurs } \end{array} \end{array}$ | - Calculate time differences <br> - Investigate time zones in Australia and around the world and convert from one time zone to another <br> - Use time zones to solve practical problems involving planning of travel and time differences |  |
| School holidays: Saturday June 22 - Sunday July 7 |  |  |  |

