<table>
<thead>
<tr>
<th>Time Allocation</th>
<th>Topic/s</th>
<th>Key Teaching Points</th>
<th>Nelson Reference</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| Weeks 1–5 (20 hours) | Topic 1.1 Consumer arithmetic | Applications of rates and percentages and use of spread sheets (1.1.1 – 1.1.8)  
- Salary, wages (including piecework/overtime) allowances and commissions  
- Government allowances and pensions  
- Prepare personal budgets  
- Unit cost method for price comparison  
- Percentage increase and decrease, simple and compound interest  
- Currency exchange rates  
- Share dividends and price earnings ratio  
- Use a spreadsheet for above computations as appropriate | Please refer to [www.nelsonnet.com.au](http://www.nelsonnet.com.au) as there are many teaching resources including worksheets & investigations that support this textbook.  
Chapter 1  
Chapter 4  
Chapter 6 | Week 2  
Investigation  
Finance Applications (6%)  
Week 5  
Topic Test 1 (7%) |
| Weeks 6–7 (5 hours) | Topic 1.2 Algebra and Matrices | Linear and non-linear expressions (1.2.1 – 1.2.3)  
- Numerical substitution into expressions  
- Formulae evaluation  
- Spread sheets, tables and formulas | Chapter 2 |  |
| Weeks 7–9 (10 hours) | Topic 1.2 Algebra and Matrices | Matrices and matrix arithmetic (1.2.4 – 1.2.7)  
- Matrices and storage/displaying of information  
- Size and type of matrices  
- Matrix arithmetic  
- Solve problems using matrices | Chapter 3 | Week 9  
Topic Test 2 (7%)  
End of T1 |
| Week 10-12  | Topic 1.3 Shape and measurement | **Pythagoras' Theorem** (1.3.1) Solve problems in 2 and 3 dimensions using Pythagoras' theorem  
**Mensuration** (1.3.2 - 1.3.4)  
- Perimeter and area of 2-D shapes, including sectors and other composite shapes  
- Volume of standard objects such as prisms, pyramids, cones, spheres, practical applications  
- Surface area, standard and composite shapes, practical applications | Chapter 5 |
|-------------|-------------------------------|------------------------------------------|-----------|
| **Weeks 13-14**  | **Topic 1.3 Shape and measurement** | **Similar figures and scale factors** (1.3.5 - 1.3.8)  
- Conditions of similarity, similar triangles  
- Scale factors and linear scaling problems  
- Scale drawings (maps and building plans), problem solving  
- Scale factors and areas of similar figures  
- Scale factors and surface area/volume of similar solids | Chapter 7 |
| **Week 15**  | **Revision / end of Unit 1** | **Week 14**  
**Topic Test 3 (7%)** | **Unit 1 Exam (15%)** |
| Weeks 16–20 (18 hours) | Topic 2.1 Univariate data analysis and the statistical investigation process | **The statistical investigation process** (2.1.1)  
- Identifying a problem and posing a statistical question  
- Collecting or obtaining data  
- Analysing the data  
- Interpreting and communicating the results  
**Making sense of data relating to a single statistical variable** (2.1.2 – 2.1.9)  
- Classifying categorical variables – organising the data  
- Classifying numerical variables (discrete/continuous) – describe the distribution, modality, shape, location and spread – interpret in context  
- Mean and standard deviation (using technology)  
- Deviations from the mean in normally distributed data  
- Quantiles in normally distributed data, the 65%, 95% and 99.7% rule, calculating probabilities for normal distributions | Chapter 8 | Week 20  
**Topic Test 4 (7%)** |
| --- | --- | --- | --- | --- |
| Week 20–22 (7 hours) | Topic 2.1 Univariate data analysis and the statistical investigation process | **Comparing data for a numerical variable across two or more groups** (2.1.10 – 2.1.12)  
- Box plots, outliers  
- Compare groups, interpret and report findings  
- The statistical process for comparing groups | Chapter 11 | Week 21  
**Investigation Statistical Applications (6%)** |
| Week 22–24 (10 hours) | Topic 2.2 Applications of trigonometry | **Applications of trigonometry** (2.2.1 – 2.2.3)  
- Trigonometry of the right triangle  
- Area of triangles, Heron’s rule and solution of practical problems  
- Sine and cosine rule and application to problems (excluding ambiguous case) | Chapter 10 | Week 24  
**Topic Test 5 (7%)** |
| Week 24–27 (10 hours) | Topic 2.3 Linear equations and their graphs | **Linear equations** (2.3.1 – 2.3.2)  
- Identify and solve linear equations  
- Word problems  
**Straight-line graphs and their applications** (2.3.3 – 2.3.6)  
- Construction of graphs  
- Gradient and intercepts, model linear relationships  
- Interpret graphs and analyse practical situations | Chapter 9 | Week 27  
**Topic Test 6 (7%)** |
### Week 27–29

<table>
<thead>
<tr>
<th>(10 hours)</th>
<th><strong>Simultaneous linear equations and their applications</strong> (2.3.7 – 2.3.8)</th>
<th><strong>Chapter 12</strong></th>
<th><strong>Week 28</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Solving simultaneous equations – graphically, algebraically and using technology appropriately</td>
<td></td>
<td>Investigation</td>
</tr>
<tr>
<td></td>
<td>• Solve practical problems</td>
<td></td>
<td>Linear graph</td>
</tr>
<tr>
<td></td>
<td><strong>Piece-wise linear graphs and step graphs</strong> (2.3.9 – 2.3.10)</td>
<td></td>
<td>Applications (6%)</td>
</tr>
<tr>
<td></td>
<td>• Sketch piece-wise linear graphs, step graphs</td>
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<tr>
<td></td>
<td>• Interpret and use to model practical situations</td>
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</tbody>
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### Week 29–30

<table>
<thead>
<tr>
<th></th>
<th><strong>Revision/end of course assessment</strong></th>
<th></th>
<th><strong>Exam (25%)</strong></th>
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### ASSESSMENT SCHEDULE

<table>
<thead>
<tr>
<th>WHEN</th>
<th>WHAT</th>
<th>TITLE</th>
<th>WEIGHTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>Investigation</td>
<td>Finance Application</td>
<td>6%</td>
</tr>
<tr>
<td>Week 5</td>
<td>Response</td>
<td>Topic Test 1</td>
<td>7%</td>
</tr>
<tr>
<td>Week 9</td>
<td>Response</td>
<td>Topic Test 2</td>
<td>7%</td>
</tr>
<tr>
<td>Week 14</td>
<td>Response</td>
<td>Topic Test 3</td>
<td>7%</td>
</tr>
<tr>
<td>Week 15</td>
<td>Exam</td>
<td>End of Unit 1</td>
<td>15%</td>
</tr>
<tr>
<td>Week 20</td>
<td>Response</td>
<td>Topic Test 4</td>
<td>7%</td>
</tr>
<tr>
<td>Week 21</td>
<td>Investigation</td>
<td>Statistical Applications</td>
<td>6%</td>
</tr>
<tr>
<td>Week 24</td>
<td>Response</td>
<td>Topic Test 5</td>
<td>7%</td>
</tr>
<tr>
<td>Week 27</td>
<td>Response</td>
<td>Topic Test 6</td>
<td>7%</td>
</tr>
<tr>
<td>Week 28</td>
<td>Investigation</td>
<td>Linear Graph Applications</td>
<td>6%</td>
</tr>
<tr>
<td>Week 30</td>
<td>Exam</td>
<td>End of Y11 Course</td>
<td>25%</td>
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