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| **F Unit 11: Ratio and Proportion** | **Road Map** | | | | | |
| In this unit you will learn about ratio and proportion. The aims are as follows:  **LG1**: Knowledge  **LG2**: Application  **LG3**: Skills | Assessment Grades |  |  | | | |
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| **Themes** | **Learning Goals/Outcomes/Content** | | |  |  |  |
| 11a Ratio | Understand and express the division of a quantity into a of number parts as a ratio; | | |  |  |  |
| Write ratios in their simplest form; | | |  |  |  |
| Write/interpret a ratio to describe a situation; | | |  |  |  |
| Share a quantity in a given ratio including three-part ratios; | | |  |  |  |
| Solve a ratio problem in context: | | |  |  |  |
| use a ratio to find one quantity when the other is known; | | |  |  |  |
| use a ratio to compare a scale model to a real-life object; | | |  |  |  |
| use a ratio to convert between measures and currencies; | | |  |  |  |
| problems involving mixing, e.g. paint colours, cement and drawn conclusions; | | |  |  |  |
| Compare ratios; | | |  |  |  |
| Write ratios in form 1 : *m* or *m* : 1; | | |  |  |  |
| Write a ratio as a fraction; | | |  |  |  |
| Write a ratio as a linear function; | | |  |  |  |
| Write lengths, areas and volumes of two shapes as ratios in simplest form; | | |  |  |  |
| Express a multiplicative relationship between two quantities as a ratio or a fraction. | | |  |  |  |

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| 11b Proportion | Understand and use proportion as equality of ratios; |  |  |  |
| Solve word problems involving direct and indirect proportion; |  |  |  |
| Work out which product is the better buy; |  |  |  |
| Scale up recipes; |  |  |  |
| Convert between currencies; |  |  |  |
| Find amounts for 3 people when amount for 1 given; |  |  |  |
| Solve proportion problems using the unitary method; |  |  |  |
| Recognise when values are in direct proportion by reference to the graph form; |  |  |  |
| Understand inverse proportion: as *x* increases, *y* decreases (inverse graphs done in later unit); |  |  |  |
| Recognise when values are in direct proportion by reference to the graph form; |  |  |  |
| Understand direct proportion ---> relationship *y* = *kx*.  **Links:**  LG1: You will simplify ratios and divide quantities in a given ratio.  LG2: You will apply your knowledge of ratio and proportion to scale recipes, convert between currencies and solve best value problems.  LG3: You will solve complex word problems involving ratio and proportion. |  |  |  |