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| **F Unit 10: More fractions, reciprocals, standard form, zero and negative indices** | | **Year 11 Road Map** | | | | |
| In this unit you will learn about number. The aims are as follows:  **LG1**: Knowledge  **LG2**: Application  **LG3**: Skills  Assessment Grades | | | | | | |
|  | **Learning Goals/Outcomes/Content** | | Video clips | R A G |  |  |
| 10a Fractions | | | | | | |
| 1 | Add and subtract mixed number fractions; | | 71 |  |  |  |
| 2 | Multiply mixed number fractions; | | 73 |  |  |  |
| 3 | Divide mixed numbers by whole numbers and vice versa; | | 74 |  |  |  |
| 4 | Find the reciprocal of an integer, decimal or fraction; | | 76 |  |  |  |
| 5 | Understand ‘reciprocal’ as multiplicative inverse, knowing that any non-zero number multiplied by its reciprocal is 1 (and that zero has no reciprocal because division by zero is not defined). | | 76 |  |  |  |
| 10b Indices and standard form | | | | | | |
| 6 | Use index laws to simplify and calculate the value of numerical expressions involving multiplication and division of integer powers, fractions and powers of a power; | | 131, 82 |  |  |  |
| 7 | Use numbers raised to the power zero, including the zero power of 10; | | 82 |  |  |  |
| 8 | Convert large and small numbers into standard form and vice versa; | | 83 |  |  |  |
| 9 | Add, subtract, multiply and divide numbers in standard form; | | 83 |  |  |  |
| 10 | Interpret a calculator display using standard form and know how to enter numbers in standard form. | | 83 |  |  |  |
| Student’s comments and questions | | | | | | |