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| **F Unit 7: Review of equations and inequalities** | | **Year 10 Road Map** | | | | |
| In this unit you will learn about equations and inequalities. The aims are as follows:  **LG1**: Knowledge **LG2**: Application **LG3**: Skills  Assessment Grades | | | | | | |
|  | **Learning Goals/Outcomes/Content** | | Video clips |  |  |  |
| **7a Equations** | | | | | | |
| 1 | Select an expression/equation/formula/identity from a list; | | 137 |  |  | R A G |
| 2 | Write expressions and set up simple equations; | | 137 |  |  |  |
| 3 | Use function machines; | | 36 |  |  |  |
| 4 | Solve simple equations; | | 100 |  |  |  |
| 5 | Solve linear equations, with integer coefficients, in which the unknown appears on either side or on both sides of the equation; | | 135a |  |  |  |
| 6 | Solve linear equations which contain brackets, including those that have negative signs occurring anywhere in the equation, and those with a negative solution; | | 135a |  |  |  |
| 7 | Solve linear equations in one unknown, with integer or fractional coefficients; | | 135a |  |  |  |
| 8 | Rearrange simple equations; | | 136 |  |  |  |
| 9 | Substitute into a formula, and solve the resulting equation; | | 95 |  |  |  |
| 10 | Find an approximate solution to a linear equation using a graph; | | 137 |  |  |  |
| 11 | Solve angle or perimeter problems using algebra. | | 137 |  |  |  |
| 12 | Write an equation to solve a word problem. | | 137 |  |  |  |
| **7b: Inequalities** | | | | | | |
| 13 | Show inequalities on number lines; | | 138 |  |  |  |
| 14 | Write down whole number values that satisfy an inequality; | | 138 |  |  |  |
| 15 | Solve an inequality such as –3 < 2*x* + 1 <7 and show the solution set on a number line; | | 139 |  |  |  |
| 16 | Solve two inequalities in *x*, find the solution sets and compare them to see which value of *x* satisfies both; | | 139 |  |  |  |
| 17 | Use the correct notation to show inclusive and exclusive inequalities; | | 138 |  |  |  |
| 18 | Construct inequalities to represent a set shown on a number line; | | 138 |  |  |  |
| 19 | Solve simple linear inequalities in one variable, and represent the solution set on a number line; | | 139 |  |  |  |
| 20 | Round answers to a given degree of accuracy. | | 32, 90 |  |  |  |

Student’s comments or questions