## Stage 9 - Solving Equations and Inequalities II <br> 

- Understand that there are an infinite number of solutions to the equation $a x+b y=c(a \neq 0, b \neq 0)$.
- Find approximate solutions to simultaneous equations using a graph.
- Derive and solve two simultaneous equations.
- Solve problems involving two simultaneous equations and interpret the solution. equations and interpret the solution.
- Solve linear equations.
- Substitute numbers into formulae.
- Plot graphs of functions of the form $y=m x+c, x \pm y$
$=c$ and $a x \pm b y=c$.
- Manipulate expressions by multiplying by a single term.
- Equation
- Simultaneous equation
- Variable
- Manipulate
- Eliminate
- Approximate
- Solution
- Solve
- Derive
- Interpret

| Solving Equations and Inequalities II - Targets | Before <br> Topic | After <br> Topic | Teacher <br> Mark |
| :--- | :--- | :--- | :--- |
| Understand that there are an infinite number of solutions to the equation $\mathrm{ax}+\mathrm{by}=\mathrm{c}(\mathrm{a} \neq 0, \mathrm{~b} \neq 0)$. |  |  |  |
| Find approximate solutions to simultaneous equations using a graph. |  |  |  |
| Solve simultaneous equations in two variables in very simple cases (addition or subtraction but no <br> multiplication required). |  |  |  |
| Solve simultaneous equations in two variables in simple cases (multiplication of one equation only required <br> with addition or subtraction). |  |  |  |
| Derive and solve two simultaneous equations. |  |  |  |
| Solve problems involving two simultaneous equations and interpret the solution. |  |  |  |

