## Stage 10 - Solving Equations and Inequalities III

- Manipulate linear equations.
- Factorise a quadratic expression of the form $x^{2}+b x+c$.
- Factorise a quadratic expression of the form $a x^{2}+b x+c$.
- Make connections between a linear equation and a graph.

- Solve a quadratic equation.
- Make connections between graphs and quadratic equations.
- Find approximate solutions to quadratic equations using a graph.
- Solve problems that involve solving a quadratic equation in context.
- Quadratic equation
- Factorise
- Rearrange
- Variable
- Unknown
- Manipulate
- Solve
- Deduce
- x-intercept
- Root

| Solving Equations and Inequalities III - Targets | Before <br> Topic | After <br> Topic | Teacher <br> Mark |
| :--- | :--- | :--- | :--- |
| Solve a quadratic equation of the form $\mathrm{x}^{2}+\mathrm{bx}+\mathrm{c}=0$ by factorising. |  |  |  |
| Solve a quadratic equation by rearranging and factorising. |  |  |  |
| Make connections between graphs and quadratic equations of the form $a x^{2}+b x+c=0$. |  |  |  |
| Make connections between graphs and quadratic equations of the form $\mathrm{ax}^{2}+\mathrm{bx}+\mathrm{c}=\mathrm{dx}+\mathrm{e}$ |  |  |  |
| Find approximate solutions to quadratic equations using a graph. |  |  |  |
| Solve problems that involve solving a quadratic equation in context. |  |  |  |

