## WHAT DO WE ALREADY 2 low

- Sketch a graph and find the roots of a quadratic function
- Solve two linear simultaneous equations in two variables by substitution and elimination
- Use set notation to list a set of integers.
- Solve an inequality on a number line

Stage 11 - Solving Equations and Inequalities II


- Solve inequalities
- Solve simultaneous equations
- Unknown - "quantity that can vary in value," 1816
- Variable
- Manipulate
- Solve - from Latin solvere "to loosen, dissolve; untie, release, explain"
- Solution Set
- Inequality
- Simultaneous
- Equation
- Substitution
- Elimination

| Solving Equations and Inequalities II - Targets | Before <br> Topic | After <br> Topic | Teacher <br> Mark |
| :--- | :--- | :--- | :--- |
| Solve a quadratic inequality (a = 1) |  |  |  |
| Solve a quadratic inequality (a > 1) |  |  |  |
| Solve simultaneous equations in two variables where one is a simple quadratic equation using substitution |  |  |  |
| Solve simultaneous equations in two variables where one is a more complex quadratic equation using <br> substitution |  |  |  |
| Make connections between simultaneous equations and graphs |  |  |  |
| Solve problems involving linear and quadratic simultaneous equations |  |  |  |

