

and Inequalities I



- Solve a quadratic equation by rearranging and factorising.
- Identify when a quadratic equation cannot be solved by factorising
- Rearrange algebraic expressions and equations.
- Calculate fluently with negative numbers.
- Understand and use interval bisection.

- Solve quadratic equations
- Solve practical problems involving quadratic equations
- Understand and use iterative processes.

- Factorise-1816, in mathematics, from factor as "pertaining to a factor."
- Rearrange
- Manipulate
- Maximum
- Minimum
- Parabola-"a curve commonly defined as the intersection of a cone with a plane parallel with its side," 1570s, from Modern Latin parabola
- Recurrence
- Relation
- Interval
- Bisection

Solving Equations and Inequalities I - Targets

	Before Topic	After Topic	Teacher Mark
Complete the square for a quadratic expression ($a = 1$) and ($a > 1$)			
Solve a quadratic equation ($a = 1$) and ($a > 1$) by completing the square			
Deduce the turning point of a quadratic function by completing the square			
Deduce the roots of a quadratic function using the completed square form			
Know and apply the formula for solving a simple quadratic equation of the form $ax^2 + bx + c = 0$			
Know and apply the formula for solving more complex quadratic equation of the form $ax^2 + bx + c = 0$			
Solve equations involving fractions that can be rearranged into the form $ax^2 + bx + c = 0$			
Solve problems in probability that generate a quadratic equation			
Solve problems involving quadratic equations			
Derive an iterative formula that can be used to find approximate solutions to a complex equation			