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**Mathematics Faculty**

**Year 10 Unit 9 Overview**

**Equations and Inequalities**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Equations and Inequalities** | I can solve quadratic equations by factorising, using the quadratic formula and by completing the square |  |  |  |
| I can construct and solve linear simultaneous equations |  |  |  |
| I can solve linear and non-linear simultaneous equations |  |  |  |
| I can solve linear inequalities |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | **Solving quadratic equations by factorisation.**  (CM clip 266) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc.  Assessment is also supported with our use of ILOs which alternate between Basic Skills Checks one week and then a more individual ILO the following set through Century and Corbettmaths.  Finally every unit is assessed half termly as part of our Assessment Calendar in Mathematics. | equation, quadratic, coefficient, term, solve, factorise, root |
| **2** | **Using the quadratic formula to solve quadratic equations.**  (CM clip 267) | equation, quadratic, coefficient, term, solve, formula, root |
| **3** | Completing the square for quadratic expressions.  (CM clip 10) | expression, quadratic, rearrange, square, bracket |
| **4** | Solving quadratic equations by completing the square.  (CM clip 267a) | equation, quadratic, term, solve, rearrange, square, root |
| **5** | **Solving linear simultaneous equations.**  (CM clip 295 & 296) | simultaneous equation, linear, solve, eliminate, substitute |
| **6** | Constructing and solving linear simultaneous equations.  (CM clip 295 & 296) | simultaneous equation, linear, construct, solve, eliminate |
| **7** | Solving simultaneous equations involving one linear and one non-linear equation.  (CM clip 298) | simultaneous equation, linear, quadratic, solve, rearrange, substitute |
| **8** | **Solving linear inequalities and showing the solution on a number line.**  (CM clips 176 – 179) | inequality, linear, solve, solution, positive, negative |