

Quality of Education: Curriculum is planned and sequenced so that new **knowledge** and **skills** build on what has been taught before and towards its clearly defined end points.

| SUBJECT: Solving Equations | | CURRICULUM PROGRESSION PATHWAYS | | | CL: Miss Z. Bradshaw | | |
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| <u>Year 7</u> | <u>Year 8</u> | <u>Year 9</u> | <u>Year 10</u> | <u>Year 11</u> | KS5 (Level 3) A-level Mathematics/Core Mathematics | Further Education and training | Careers |
| <p>NP2 Missing numbers, inverse operations, equality</p> <p>NP3 Missing numbers, inverse operations, equality</p> <p>NP4 Missing numbers, inverse operations, equality</p> <p>NP5 Missing numbers, inverse operations, equality</p> <p>NP6 Missing numbers, inverse operations, equality</p> <p>A1 Working with unknowns, inverse operations</p> | <p>A4 Solving linear equations formally</p> <p>GM2 Finding missing angles in triangles and quadrilaterals</p> <p>GM3 Unknowns in the context of area</p> <p>A5 Rearranging formulae</p> <p>NP10 Finding a percentage change</p> <p>NP11 Equivalent ratios as equivalent fractions</p> | <p>A7 Using the nth term</p> <p>A8 Solving inequalities</p> <p>A9 Speed, distance and time</p> <p>SP3 Finding unknown probabilities using 'sum to 1'</p> <p>A10 Solving linear simultaneous equations</p> <p>GM4 Unknowns in the context of similarity</p> <p>GM5 Pythagoras' Theorem, right-angled trigonometry</p> <p>NP13 Reverse percentages, direct and inverse proportion, compound measures</p> <p>GM6 Working with circle formulae</p> <p>GM7 Finding unknown angles in polygons</p> | <p>NP14 Recurring decimals as fractions</p> <p>A11 Rearranging complex formulae</p> <p>A12 Solving quadratics through factorising, formula and simple completing the square</p> <p>GM8 Unknowns in the context of surface area and volume</p> <p>A13 Unknowns in the context of sequences, recurrence relations</p> <p>GM9 Non-right-angled trigonometry and 3D trigonometry</p> <p>SP6 Solving problems with unknowns and averages</p> <p>NP15 Equations involving indices and surds</p> | <p>A14 Solving quadratic equations and inequalities</p> <p>NP16 Exponentials, problems with ratio, proportion and unknowns</p> <p>GM10 Unknowns in the context of vectors</p> <p>SP7 Unknowns in the context of probability</p> <p>A15 Solving equations involving function notation, estimating solutions with graphs and iteration</p> <p>A17 Equations with algebraic fractions</p> <p>GM11 Unknowns in various geometric contexts</p> | <p>AS PURE Unit 2 Solve Quadratic Equations</p> <p>AS PURE Unit 3 Solve Linear and Quadratic Simultaneous Equations and Inequalities</p> <p>AS Pure Unit 10 + A2 Pure Unit 6 + 7 Solve Trigonometric Equations</p> <p>AS Pure Unit 14 Solving equations with Exponentials and Logarithms.</p> <p>A2 Pure Solve differential Equations</p> <p>A2 STATS Unit 3 Solve Simultaneous Equations in the Context of Mean and Standard Deviation.</p> <p>A2 MECH Unit 4 Solve Equations in</p> | Further Education and training | <p>Budget analysts</p> <p>Auditors</p> <p>Accountants</p> <p>Insurance</p> <p>Underwriters</p> <p>Loan officers</p> |

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| | | | | | Context of Equations for Moments and Forces in Equilibrium A2 MECH Unit 7 Solve Simultaneous Equations in the Context of Tension and Acceleration A2 Mech Unit 6 Solve Equations Modelling Projectile Motion (Quadratics) | | |
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