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| **Core Knowledge Map** | | | |
| Subject: **Mathematics** | Year: 10 | | Term: Spring 1 |
| What are we learning? | | | |
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| How will I be assessed | | | |
| Retrieval Tasks, Exit tickets, end of half-term test. | | | |
| Big questions: | | | |
| Can you….?   * Describe the four methods that you can use to solve a quadratic equation. * Factorise and solve y2 + 7y + 12 = 0 * Use the formula to solve 2p2 – 5p + 2 = 0 giving your solutions to 2 dp * Derive the quadratic formula from the general form ax2 + bx + c = 0 | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Expanding double and triple brackets * Factorising quadratic expressions into double brackets * Rounding * Solving linear equations * Substituting into formula and rearranging. | | * GCSE synoptic and multi-step problem solving questions * Linear and non-linear simultaneous equations * Quadratic graphs. * Finding the min/max point of a quadratic function by completing the square * A Level – quadratic equations and the discriminant are used extensively in both pure and applied maths. | |
| Core knowledge: | | Key vocabulary: | |
| * To solve a quadratic equation, ensure the equation is equal to zero – rearrange if necessary. * Quadratic formula * A quadratic equation will have none, one or two solutions. * The discriminant is b2 – 4ac and can help determine the number of solutions an equation will have. | | Quadratic  Formula  Factorising  Solve  Root/Solution  Complete the square  Geometric interpretation  Discriminant | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |