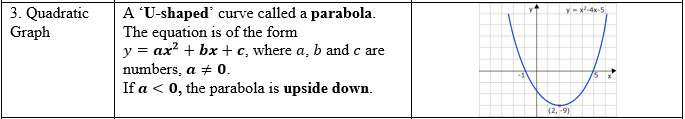
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| **Topic/Skill** | **Definition/Tips** | **Example**  **Topic: Solving Quadratics by Factorising** |
| 1. Quadratic | A quadratic expression is of the form  where and are numbers, | Examples of quadratic expressions:  Examples of non-quadratic expressions: |
| 2. Factorising Quadratics | When a quadratic expression is in the form find the two numbers that **add to give b** and **multiply to give c**. | (because 5 and 2 add to give 7 and multiply to give 10)  (because +4 and -2 add to give +2 and multiply to give -8) |
| 3. Difference of Two Squares | An expression of the form can be factorised to give |  |
| 4. Solving Quadratics | Isolate the term and square root both sides.  Remember there will be a **positive and a negative solution**. |  |
| 5. Solving Quadratics | **Factorise** and then **solve = 0**. |  |
| 6. Solving Quadratics by Factorising | **Factorise** the quadratic in the usual way.  **Solve = 0**  Make sure the equation = 0 before factorising. | Solve  Factorise: |



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| --- | --- | --- |
| 3. Quadratic Graph | A ‘**U-shaped**’ curve called a **parabola**.  The equation is of the form  , where , and are numbers, .  If **,** the parabola is **upside down**. | Image result for quadratic graph definition math |
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**Knowledge Organiser**