**Student Assessment Sheet – Forming and Solving Equations**

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| **Objective** | **Before teaching** | | | | **Date of lesson/s** | **After teaching** | | | |
| **Limited** | **Developing** | **Secure** | **Extending** | **Limited** | **Developing** | **Secure** | **Extending** |
| Use function machines to solve basic linear equations. |  |  |  |  |  |  |  |  |  |
| Solve simple linear equations. |  |  |  |  |  |  |  |  |  |
| Derive basic formulae from words. |  |  |  |  |  |  |  |  |  |
| Solve linear equations with unknowns on both sides. |  |  |  |  |  |  |  |  |  |
| Solve linear equations with an unknown on one side with brackets. |  |  |  |  |  |  |  |  |  |
| Solve linear equations with unknowns on both sides involving brackets. |  |  |  |  |  |  |  |  |  |
| Rearrange linear formulae. |  |  |  |  |  |  |  |  |  |
| Factorise and solve quadratics in the form  ax² + bx + c = 0 where a = 1. |  |  |  |  |  |  |  |  |  |
| Solve linear simultaneous equations. |  |  |  |  |  |  |  |  |  |
| Rearrange formulae that include brackets, fractions and square roots. |  |  |  |  |  |  |  |  |  |
| Rearrange formulae where the variable appears twice. |  |  |  |  |  |  |  |  |  |
| Find approximate solutions to equations numerically using iteration. |  |  |  |  |  |  |  |  |  |
| Factorise and solve quadratics in the form  ax² + bx + c = 0 where a > 1. |  |  |  |  |  |  |  |  |  |
| Solve quadratics using the quadratic formula. |  |  |  |  |  |  |  |  |  |
| Solve fractional linear equations with an unknown in the denominator. |  |  |  |  |  |  |  |  |  |
| Complete the square to solve quadratic equations. |  |  |  |  |  |  |  |  |  |
| Solve fractional quadratic equations. |  |  |  |  |  |  |  |  |  |
| Solve a pair of simultaneous equations where one is nonlinear. |  |  |  |  |  |  |  |  |  |
| Use completing the square to find maximum and minimum values. |  |  |  |  |  |  |  |  |  |