

Basic Algebra and Sequences 2

Objective	Sparx Task	
1.Understand types of algebraic expression and manipulate by simplifying, cancelling, factorising etc	D663	
2.Solve linear equations that involve fractions/negatives/unknowns on both sides etc	U755 U325 U870 U505 U599	
3.Use index laws with algebraic terms, including fractional/negative powers	D138	
4.Rearrange a formula, including cases where the subject is on both sides	U556	
5.Factorise a quadratic expression (including difference of two squares)	U228 U960	
6.Generate and find nth term rules for linear sequences	U498	
7.Generate and find rules for quadratic sequences		
8.Recognise arithmetic/geometric sequences. Find nth term rules for geometric sequences	U958	
9. Substitute into the kinematics formulae		
10. Set up simple equations from word problems	U150	
11. Recognise and use special types of sequences such a primes/ triangular number/ Fibonacci etc	U680	
12. Solve problems that involve a comparison of sequences		
13. Use surds within geometric progressions		
14. Solve problems involving sequences in real life situations		

Equations & Inequalities

Objective	Sparx Task	
1.Solve a quadratic equation by factorising. Including squared coefficients greater than 1.	U960 U228	
2.Solve a quadratic equation by using the formula	U665	
3.Complete the square on a quadratic and use this to solve an equation	U589	
4.Solve two linear equations simultaneously by using elimination and substitution methods	U760	

5.Solve simultaneous equation with 1 linear and 1 quadratic	U757	
6.Solve simultaneous equations with 1 linear and 1 equation of a circle.	U875	
7.Set up simultaneous equations and interpret solutions from problems.	U137	
8.Show inequalities on number lines and list sets of solutions.	U509	
9.Solve linear inequalities and show solutions on a number line	U759 U738	
10. Solve 2 inequalities and find which solutions satisfy both constraints.	U145	