


Subject	Year	Month	
Mathematics	10	May	
Topic:			
Solving quadratic equations algebraically			7 lessons
Content (Intent)			
Prior Learning Year 10 Expanding 7 factorising in Algebra the basic September	Future Learning Year 10 Solving inequalities June Year 12 Pure Chapter 2 Quadratics Pure Chapter 3 Equations and inequalities		
Objectives <ul style="list-style-type: none"> Factorise quadratic expressions in the form $ax^2 + bx + c$; Solve quadratic equations by factorisation and completing the square; Solve quadratic equations that need rearranging; Set up and solve quadratic equations; Solve simple quadratic equations by using the quadratic formula; Find the exact solutions of two simultaneous equations in two unknowns; Use elimination or substitution to solve simultaneous equations; Solve exactly, by elimination of an unknown, two simultaneous equations in two unknowns: <ul style="list-style-type: none"> linear / linear, including where both need multiplying; linear / quadratic; linear / $x^2 + y^2 = r^2$; Use sketches as a check to the algebraic solutions Set up and solve a pair of simultaneous equations in two variables for each of the above scenarios, including to represent a situation; Interpret the solution in the context of the problem; 			
Pedagogical notes (implementation)		How will understanding be assessed & recorded (Impact)	
Remind students to use brackets for negative numbers when using a calculator, and remind them of the importance of knowing when to leave answers in surd form. Reinforce the fact that some problems may produce one inappropriate solution which can be ignored. Clear presentation of working out is essential. Link with graphical representations.		End of half term no End of Year Mocks in November yr11	
		How can parents help at home?	
		MathsWatch clips (Qualification KS4)	
Further reading/discussion			
Reading / Enrichment	Literacy	Numeracy Links	Careers Links Engineering Physicist Military Agriculture