

NAME		TEACHER				
My GCSE Target Grade is		End of Cycle Teacher Assessment Please circle				
		SAE	AE	E	BE	SBE
End of unit assessment type		Your end of topic assessment will be a written exam.				

YEAR 10 HIGHER	CYCLE 5: MORE ALGEBRA
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	Knowledge	Prior knowledge	End of topic
Equations & Graphs	Simultaneous Equations – I can solve simultaneous equations graphically by drawing graphs on an axis (including when one is linear and one is quadratic)		
	Inequalities Graphically – I can represent inequalities on graphs and identify regions which satisfy a set of inequalities		
	Quadratic Functions – I can recognise and draw quadratic functions and identify key points on the graph (both accurately and sketching) and find approximate solutions		
	Quadratic Inequalities – I can solve quadratic inequalities and correctly identify the region(s) that is satisfied by the function		
	Iteration – I can solve quadratic and cubic equations using an iterative process and I am confident rearrange complex equations to reach a given form		
	Cubic Functions – I can find the roots of cubic functions and sketch on an axis		
Algebra	Expanding Triple Brackets – I can expand triple brackets, simplify and apply to problems involving area and volume.		
	Re-arranging Formulae – I can change the subject of complex formula where the power of the subject appears & where the subject appears twice		
	Algebraic Fractions – I can add, subtract, multiply and divide algebraic fractions		
	Algebraic Fractions 2 – I can simplify algebraic fractions using factorisation and the HCF		
	Solving Algebraic Fractions – I can solve equations involving algebraic fractions (including those that need factorising)		
	Surds 2 – I can rationalise the denominator of a surd (including of the form $a\sqrt{b} + c$)		
	Surds – I can simplify expressions involving surds and expand brackets involving surds		

LEARNING TOOLS

KEY CONCEPTS	Surds	Why do we need to rationalise the denominator of a surd?			
	Answer below:				
KEY WORDS		Expand	Cubic	Irrational	Iterate
KEY EQUATION	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">$\sqrt{a} + \sqrt{b} \neq \sqrt{a+b}$</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">$\frac{\sqrt{a}}{\sqrt{b}} = \sqrt{\frac{a}{b}}$</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">$\sqrt{a} \times \sqrt{b} = \sqrt{a \times b}$</div> </div>				