Maths Year 11 higher curriculum map



Year 11	T1	T2	Т3	T4	Т5	Т6
Content / Topic for Term	Trigonometry Algebraic fractions Circle theorems Vectors	Sine and cosine rules Equations of a circle Any recap needed	Further quadratics Functions Sketching and transforming graphs Velocity-time graphs Rates of change and proportionality	Growth and decay Algebraic proof Data and probability recap Transformation and invariant points Exam prep Lessons planned following PPEs	Exam prep Lessons planned following PPEs	Exam prep Lessons planned following PPEs
Key knowledge for acquisition, recall and application in assessment or exam	 Know the exact trig values Angles of elevation and depression Knowledge of four operations with numerical fractions Factorising quadratics Know the seven circle theorems Recognise parallel vectors and vectors in opposite directions 	 Relevant trigonometry formulae Equation of a circle Know that the radius and tangent always meet at a right angle Equation of a line and gradients of perpendicular lines 	 Understand function notation Know the rules of transforming graphs Know the graphs of y = sin x and y = cos x Understand that the gradient of a velocity-time graph is the acceleration and that the area 	 Define exponential growth and decay Set notation Know when to use two-way tables vs tree diagrams vs venn diagrams Represent odd and even numbers in the context of algebraic proof 		

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Key skills to apply in assessment or exam•Apply rules of bearings to trigonometry problems•Use and apply the equation of a circle vint centre at the origin•Solve quadratic equations by factorising, using graphs of to trigonometry problems•Sules and apply the equation of a circle vint centre at the origin•Solve quadratic equations by factorising, using graphs of completing the solve algebraic fractions•Use and apply the equation of a circle vint centre at the origin•Solve quadratic equations by factorising, using graphs of completing the solve algebraic fractions•Use and apply the equation of a circle•Solve quadratic equations by factorising, using graphs of quadratics connections to graphs of ortin•Solve and equations factorising, using interpret growth angled triangles in angled triangles in<						
Key skills to apply in assessment or exam•Apply rules of bearings to trigonometry problems•Use and apply the equation of a circle origin•Solve quadratic equations by factorising, using origin•Set up, solve and interpret growth and decay or problems, multiply, divide and solve algebraic fractions•Use and apply the equation of a tangent to a line•Solve quadratic equation of a square and make completing the including•Set up, solve and interpret growth and decay•Apply and prove the standard circle theorems•Work out the equation of a tangent to a line•Completing the including graphs of quadratics•Compound interset•Apply and prove the standard circle theorems•Apply Pythagoras' circlesgraphs of interset•Complete probability•Add and subtract column vectors egometry problems parallel and colinear•Rearranging equations•Evaluate interpret diagrams and composite•Rearrange to work out inverse of any function (including trig graphs) ef any function•Complete equations•Prove that vectors are parallel and colinear•Hertice equations•Transform graphs of any function (including trig graphs) eCalculate or algebra to etimate•Complete equations•Calculate or algebra to etimate•Complete etimate•Composite etimate•Composite etimate				under the curve is the distance	• Describe the changes achieved by combinations of rotations,	
Key skills to apply in assessment• Apply rules of bearings to trigonometry problems• Use and apply the equation of a circle with centre at the origin• Solve quadratic equations by factorising, using the formula, or completing the square and make conspliting add and solvract column vectors 					translations	
gradients of	Key skills to apply in assessment or exam	 Apply rules of bearings to trigonometry problems Simplify, add, subtract, multiply, divide and solve algebraic fractions Apply and prove the standard circle theorems Add and subtract column vectors Apply vectors to geometry problems Prove that vectors are parallel and colinear 	 Use and apply the equation of a circle with centre at the origin Work out the equation of a tangent to a line Apply Pythagoras' Theorem to right-angled triangles in circles Rearranging equations 	 Solve quadratic equations by factorising, using the formula, or completing the square and make connections to graphs of quadratics Rearrange to work out inverse functions Evaluate composite functions Transform graphs of any function (including trig graphs) Calculate or estimate gradients of 	 Set up, solve and interpret growth and decay problems, including compound interest Complete probability problems by applying the rules of tree diagrams and venn diagrams Calculate and interpret conditional probabilities Apply rules of algebra to complete 	

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			velocity-time	algebraic proof	
			graphs and areas	questions	
			under graphs	 Use the four 	
			• Estimate	transformations	
			instantaneous	to work out	
			acceleration from	invariant points	
			a velocity-time		
			graph by drawing		
			a tangent		
			 Interpret the 		
			gradient of a		
			straight line graph		
			as a rate of		
			change		
			 Interpret the 		
			gradient at a point		
			on a curve as the		
			instantaneous		
			rate of change		
Title of	Algebraic fractions	Trigonometry	Further quadratics	Growth and decay	
Knowledge					
Organiser	Vectors	Equation of a circle	Graphs and graph	Proof	
		and tangent	transformations		
	Circle theorems				