

YEAR 11 Edexcel GCSE (9-1) Mathematics Higher			
TERM	UNIT / LESSON	PRIOR KNOWLEDGE	LEARNING INTENTIONS
Key: Italic specification references are assumed prior knowledge and are covered in the prior knowledge check rather than the main teaching.			
Wk 8	<h1>Mock Exams</h1>		
30/10/2023			
Wk 9			
06/11/2023			
Wk 10	18.1 Vectors and vector notation	Use vectors to describe translations.	Understand and use vector notation.
13/11/2023		Recall and use Pythagoras' Theorem.	Work out the magnitude of a vector.
		Simplify surds.	
	18.2 Vector arithmetic	Understand the components of a vector and use vectors to describe translations.	Calculate using vectors and represent the solutions graphically.
		Recall properties of triangles and quadrilaterals.	Calculate the resultant of two vectors.
Wk 11	18.3 More vector arithmetic	Use properties of a parallelogram to identify equal and parallel lines.	Solve problems using vectors.
20/11/2023		Add two column vectors.	Use the resultant of two vectors to solve vector problems.
	18.4 Parallel vectors and collinear points	Identify parallel column vectors. Add and subtract column vectors.	Express points as position vectors. Prove lines are parallel. Prove points are collinear.
	18.5 Solving geometric problems	Understand the relationship between ratio and fractional parts Identify parallel vectors	Solve geometric problems in two dimensions using vector methods. Apply vector methods for simple geometric proofs.
Wk 12	13.2 Graph of the sine function	Know the exact values of $\sin \theta$ for $\theta = 30^\circ, 45^\circ, 60^\circ$ and 90° Use Pythagoras' theorem.	Understand how to find the sine of any angle. Know the graph of the sine function and use it to solve equations.
27/11/2023		Find angles using the sin function.	
	13.3 Graph of the cosine function	Know the exact values of $\cos \theta$ for $\theta = 30^\circ, 45^\circ, 60^\circ$ and 90° Use Pythagoras' theorem.	Understand how to find the cosine of any angle. Know the graph of the cosine function and use it to solve equations.
		Find angles using the cos function.	
	13.4 The tangent function	Know the exact values of $\tan \theta$ for $\theta = 30^\circ, 45^\circ, 60^\circ$ Use Pythagoras' theorem.	Understand how to find the tangent of any angle. Know the graph of the tangent function and use it to solve equations.
		Find angles using the tan function.	
Wk 13	13.5 Calculating areas and the sine rule	Calculate the area of a triangle using $(1/2)b \times h$	Find the area of a triangle and a segment of a circle.
04/12/2023		Know the formula for calculating the area of a circle.	Use the sine rule to solve 2D problems.
		Use trigonometry	
Wk 14	13.6 The cosine rule and 2D trigonometric problems	Use bearings	Use the cosine rule to solve 2D problems.
11/12/2023		Calculate the area of a triangle. Solve calculations.	Solve bearings problems using trigonometry.
	13.7 Solving problems in 3D	Use the sine and cosine rule.	Use Pythagoras' theorem in 3D. Use trigonometry in 3D.
Christmas Holiday			