

YEAR 11

HALF TERM 2

<b>What? When? Why?</b>	<b>Lesson 1 Learning intentions</b> (what can a student do at the end of the lesson)	<b>Lesson 2 Learning intentions</b> (what can a student do at the end of the lesson)	<b>Lesson 3 Learning intentions</b> (what can a student do at the end of the lesson)	<b>Lesson 4 Learning intentions</b> (what can a student do at the end of the lesson)
Week 1	Calculate with numbers in standard form (calc)	HCF and LCM (inc algebraic) (R)	Expand and factorise single brackets.	Expand and simplify double brackets.
Week 2	Factorise $x^2+bx+c$ and Solve $x^2+bx+c=0$	Recognise and use: sequences of triangular, square and cube numbers. Simple arithmetic progression, <u>Fibonacci</u> -type sequences, quadratic sequences, and simple geometric progressions	Use and find the n <sup>th</sup> term of a linear sequence.	Solve problems involving linear sequences
Week 3	Understand and use the n <sup>th</sup> term of a quadratic sequence.	Pythagoras theorem finding the hypotenuse (R)	Pythagoras theorem finding a shorter side	Problem solving involving Pythagoras' theorem.
Week 4	Introduction to trigonometry. Using sine to find a side.	Using cosine and tangent to find a shorter side.	Finding the hypotenuse.	Finding an angle.
Week 5	Finding an angle	Mixture of finding a side and angle.	Problem solving with trigonometry.	Area of a triangle = $\frac{1}{2}ab\sin C$
Week 6	Exact values Non calculator trigonometry.	Construct angles and triangles using ruler, compasses and a protractor	Locus of distance from a point Locus of distance from a straight line Locus equidistant from two points	Construct a perpendicular bisector Construct a perpendicular from a point Construct an angle bisector
Week 7	Solve loci problems	Change the subject of a simple formula	Change the subject of a complex formula	Change the subject where the subject appears more than once

