

## Year 7 Higher Revision List - April 2019

<u>Objective</u>	<u>Hegarty Maths Clip</u>	<u>Objective</u>	<u>Hegarty Maths Clip</u>
Identify factors and multiples of a number	27	Calculate the perimeter of a rectangle by adding.	549
Find common factors and common multiples of two numbers	27/33	Use appropriate units for the perimeter of a shape.	691
Know the square numbers up to 15x15 and their corresponding roots	99/101	Calculate the perimeter of a triangle and other polygons by adding.	549
Identify prime numbers	28	Measure shapes and find their perimeter.	548
Find the HCF and LCM of two numbers	32/35	Calculate the perimeter of a shape made from rectangles where all the values required are given.	549
Change between numbers in standard form and ordinary numbers	112/123	Calculate the perimeter of a shape made from triangles, rectangles and other quadrilaterals where all the values required are given.	549
Recognise a <b>linear</b> sequence and use the term-to-term rule to generate further terms.	197	Calculate the perimeter of a shape made from rectangles where some of the values required must be calculated.	550
Generate the terms of a <b>linear</b> sequence using the <b>term</b> -to-term rule.	197	Calculate the perimeter of a shape made from triangles, rectangles and other quadrilaterals where some of the values required must be calculated.	551
Identify the term-to-term rule of a <b>linear</b> sequence.	197	Know, understand and use the formula for finding the circumference of a circle.	534
Recognise the sequences of <b>triangular</b> , square and cube numbers and the Fibonacci sequence, and use the term-to-term rule to generate further terms.	261	Calculate the perimeter of a semi-circle.	536
Recognise <b>quadratic</b> sequences, and use the term-to-term rule to generate further terms.	247	Calculate the perimeter of a quadrant.	544
Recognise <b>simple geometric</b> sequences, and use the term-to-term rule to generate further terms.	264	Understand and use function notation.	288
Use algebraic notation and symbols correctly.	151	Find the value of a function at a given point.	288
Understand the vocabulary of algebra, including the words term and factor.	151	Find the inverse function	295
Understand that algebraic operations follow the same conventions and order as arithmetical operations.	152	Solve two-step linear equations, e.g. $2x + 1 = 7$ , where the answers are positive integers.	179
Simplify expressions involving one variable by collecting like terms.	156	Solve all multi-step linear equations, leaving answers as fractions where appropriate	180/181/ 182
Simplify expressions involving more than one variable by collecting like terms.	157	Solve linear equations involving brackets, e.g. $3(2x - 4) = 6$ .	179
Multiply a number by a bracket.	160	Solve linear equations where the unknown appears on both sides.	184
Multiply a single term by a bracket.	160	Solve two linear simultaneous equations algebraically where no multiplication is needed.	190
Write expressions using powers.	173	Interpret a column vector	637/638
Simplify expressions involving the multiplication and division of indices.	173	Describe movement using column vectors	637/638
Solve simple proportion problems using unitary method	339	Translate a 2d shape when given a column vector	637/638
Use proportion in real contexts (direct only).	339	Describe the translation of a 2d shape using a column vector	637/638
Understand ratio	328	Represent single column vectors graphically.	622
Understand and use ratio notation	328	Identify the column vector from a diagram (single vector)	623
Reduce a ratio to its simplest form	329	Multiply a column vector by a scalar and show this graphically.	626
Use ratio in relation to standard and compound units	330	Recognise and name polygons	822
Use scale diagrams and maps	864	Understand the terminology (e.g. regular, irregular, etc), notation (e.g. for parallel sides, equal, sides, etc) and properties relating to polygons.	822

Relate ratios to fractions	330	Calculate and use angle sums of polygons	560
Express a relationship between two quantities as a ratio or a fraction	330	Understand and use properties of angles on a straight line	477
Solve problems involving converting between units of time.	709	Understand and use properties of vertically opposite angles	480
Choose appropriate units for estimating or carrying out measurements	691	Understand and use properties of angles at a point	479
Convert between units of measure in the same system	692	Understand and use the angle sum of triangles, find missing angles in scalene triangles	485
Solve problems involving the addition and subtractions of units of measure.	714	Find missing angles in isosceles and equilateral triangles	486
Round numbers to a given power of ten	17	Understand and use three figure bearings to specify direction	492
Round to a given number of decimal places (including money)	56	Measure the bearing of a point B from a point A	492
Round to any number of significant figures	130	Mark on a diagram the position of the point B given its bearing from point A	492
Estimate answers to calculations using approximation and rounding	131	Measure or draw a bearing between the points on a map or scaled plan	493
Understand that premature rounding can cause problems when undertaking calculations with more than one step	132	Given the bearing of a point B from point A, work out the return bearing of A from B	494
Calculate speed, distance or time, given the other two	716-724	Use accurate drawings to solve bearing problems	495