

Week	36	37	38	39
W/C Date	25-Jun 4 weeks	2-Jul	9-Jul	16-Jul End term
Topic	Calculating	Calculating	Visualising & Constructing	Visualising & Constructing
Key Objectives	Indices: +ve, -ve, fractional, evaluating with and without a calculator	Standard Form: 4 operations, calculator methods, rounding (inc limits), truncating.	Ruler and Compass Methods: Perpendicular and angle bisectors, loci from a point and a line.	Solving loci problems. Constructing 2-d shapes. Constructions involving plans and elevations.
Assessment		BAM 9M1		BAM 9M8
Homework				

Maths Department Year 9

Higher Tier Grades 4+ long term plan

	Assessment weeks
	Moderation week
	Data Capture
	STAR marking
	Exit Poll

Key skills covered:

Number:
Using +ve, -ve and fractional indices with and without a calculator, calculating in standard form with limits associated with rounding, direct and inverse proportionality.

Algebra:
Identifying and using identities, multiplying linear expressions to form quadratics, factorising quadratics (coefficient of $x^2 = 1$), generating quadratic sequences, solving inequalities with brackets and unknowns on one or both sides, using straight line graphs, plotting quadratic cubic and reciprocal functions, forming and solving simultaneous equations graphically and algebraically.

Shape and Space:
Ruler / compass construction methods and problem solving: including loci from a point and a line, the circle and its parts, surface area of prisms including the cylinder, Pythagoras' theorem in 2-d, congruency and similarity in triangles.

Data and Probability:
Probability tree diagrams / sample spaces for dependent and independent events, scatter diagrams/lines of best fit – estimating.

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
W/C Date	03-Sep 7 weeks	10-Sep	17-Sep	24-Sep	01-Oct	08-Oct	15-Oct End half term		29-Oct 8 weeks	05-Nov	12-Nov	19-Nov	26-Nov	03-Dec	10-Dec	17-Dec End term		
Topic	Algebraic Proficiency	Algebraic Proficiency	Algebraic Proficiency	Proportional Reasoning	Proportional Reasoning	Proportional Reasoning	RECAP		Sequences	Sequences	Equations & Inequalities	Equations & Inequalities	Calculating Space	Calculating Space	Calculating Space	RECAP		
Key Objectives	Identities. Multiplying linear expressions to form quadratics.	Factorising quadratics: Form x^2+bx+c	Equivalences. Expressions and formulae: Using both to describe a situation.	Understand proportionality: Situations and graphically. Conversions: Density and speed.	Problem solving, using expressions or formulae: D&I prop. inc compound measures.	Identify congruency and similarity: Finding missing lengths.	Indices. Standard Form. Constructions. Quadratics.		Fibonacci sequences: Recognise, use and generate types of F sequence.	Quadratics: Explore and generate Qs using next term, nth term or a written rule.	Solving inequalities: Unknown on one side, inc. set notation & number line.	Solving inequalities: Unknown on 2 sides; with brackets and -ve terms.	The circle: Definitions. Arc length, Sector area (and angle): Both in terms of π .	Surface area: Prisms to include the cylinder	Pythagoras' Theorem: Calculating hypotenuse and a shorter side in 2-d.	Indices/s.form. Quadratics. Proportionality Inequalities.		
Assessment		BAM 9M2	BAM 9M3		BAM 9M7	BAM 9M9						BAM tbc		BAM 9M10	BAM 9M11			
Homework																		

Week	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
W/C Date	07-Jan 6 weeks	14-Jan	21-Jan	28-Jan	04-Feb	11-Feb End half term		25-Feb 7 weeks	04-Mar	11-Mar	18-Mar	25-Mar	01-Apr	08-Apr End term		
Topic	Revision	Assessment & Conjecturing	Conjecturing	Algebraic Proficiency	Algebraic Proficiency	RECAP		Algebraic Proficiency	Algebraic Proficiency	Equations & Inequalities	Equations & Inequalities	Equations & Inequalities	RECAP	Revision		
Key Objectives	Supporting specific preparation for Week 20 Assessments	Congruency: Know/use the 4 rules for congruency. Problem solving.	Similarity: Know how to find and use the multiplier to solve simple problems.	Linear functions: Identify / use the gradient / intercept of a line; $y=mx+c$	Equation of a line: Thro' 1 point with gradient. Thro' 2 points.	Proportionality. The circle. Surface area. Pythagoras.		Rates of change: Interpreting real life graphs.	Plotting functions: Quadratics, cubics and reciprocals	Simultaneous Equations: Approx. solutions from a graph, algebraic + or -.	Simultaneous Equations: + and/or -. Multiplying one equation with + or -.	Simultaneous Equations: Multiplying with + and/or -. Derive, solve and interpret solutions.	Pythagoras. Congruency and similarity. Linear equations. Plotting functions.	Supporting specific preparation for Week 35 Assessments		
Assessment			BAM 9M12		BAM 9M4				BAM 9M6			BAM 9M5				
Homework																

Week	35	36	37	38	39	40	41	42	43	44	45	46	46
W/C Date	29-Apr 4 weeks	06-May BH Mon	13-May	20-May End half term		03-Jun 3 weeks	10-Jun	17-Jun Roll over	24-Jun 4 weeks	01-Jul	08-Jul	15-Jul End term	
Topic	Assessment	Skills check and Consolidation from exams.	Assessment Understanding Risk	Understanding Risk		Presenting Data	Presenting Data	Algebraic Proficiency RECAP					
Key Objectives	GCSE style exam Paper 1 non-calculator	Tailored feedback and teacher led	Probability:	Probability tree diagrams:		Time series graphs and	Scatter diagrams and correlation.	Recap key algebraic techniques,					

