



Bishop Challoner Catholic College

Maths Department

Year 11 December Mocks: Higher Revision List

Paper 1 (Non-Calculator): Thursday 4th December 2025

Paper 2 (Calculator): Thursday 11th December 2025

Paper 3 (Calculator): Tuesday 16th December 2025

Each paper is 1 hour 30 minutes long. It is recommended that you use your class notes, <https://vle.mathswatch.co.uk/vle/> and <https://corbettmaths.com/contents/> to help with your revision. Below are the clips that are relevant to the topics that are to be tested.

Your username is the same as the beginning of your email address: **21aaabbb@bishopchalloner** where **aaa** are the first 3 letters of your first name, and **bbb** are the first 3 letters of your surname. Password is **bishop**.

When you log in, click on videos, and select the qualification as 'GCSE'.

Equipment required for each mock: Calculator, protractor, ruler, pen and pencil

Algebra

Topic	MathsWatch	Corbett Maths	Revised?
Algebraic manipulation and substitution	137	16, 115	
Expanding and simplifying, including quadratics and expanding triple brackets	134b	14, 15	
Solving linear equations	135a	111, 113	
Solving linear inequalities, and representing on a number line	138, 139	176, 177, 178, 179	
Solving quadratic inequalities	212	378	
Rearranging formulae	190	7, 8	
Factorising and solving quadratics	157	117, 266	
Solving simultaneous equations graphically	140	297	
Simplifying algebraic fractions	210a	23, 24	
Parallel and perpendicular lines	159b, 208, 97	189, 190, 194, 195, 196, 197	
Inequalities and quadratic inequalities	212	378	
Sequences, including quadratic nth term	213	388a, 388b, 388c	
Straight Line Graphs (drawing)	96, 97, 99, 159a	186, 187	
Estimating areas under curves	216a	389	
Estimating gradients to curves	126b	390a, 390b	
Algebraic proof	193	365	
Graphing trigonometric functions	195a/b, 196b	324	

Number, Ratio & Proportion

Topic	MathsWatch	Corbett Maths	Revised?
Adding, subtracting, multiplying & dividing decimals	66-67	90 - 94	
Adding, subtracting, multiplying & dividing fractions	71-74	142, 139, 134, 133	
Increase/decrease by a percentage	108	239	
Percentage change, including percentage profit	88, 109	233	
Ratio (sharing in a given ratio); expressing as a fraction	106	270, 271	
Ratio (combining and subdividing ratios)	165b, 200a	271d	
Direct and inverse proportion	199	254, 255	
Standard form, including conversions and calculations	83	300 - 303	
Compound measures (speed, distance, time)	142	299	
Compound measures (mass, density, volume)	142	384	
Error intervals & truncation	155	377	
Estimation	91	215	
Indices including fractional and negative	154	175, 173	
Surds (simplification and expanding brackets)	207a-c	307	
Unit conversion	112	350, 351	

Handling Data and Geometry

Topic	MathsWatch	Corbett Maths	Revised?
Calculating probabilities	59	248	
Probability tree diagrams, and algebraic probability problems	204	252	
Proportional sampling (stratified sampling)	152, 176	281	
Angles, including angles in polygons	123	32	
Area & circumference of a circle	117, 118	59, 60	
Volume and surface area of prisms	114a/b, 119	356, 357, 310	
Right angled trigonometry, including 3D trigonometry	168, 217-218	330 - 332	
Non-right-angled trigonometry	201-203	333, 334, 335-337	
Areas and perimeters of sectors	167	46, 58, 63	
Vectors	219	353	
Cumulative Frequency, Box Plots and IQR	186	153, 154	
Calculating medians & quartiles from raw data	62	50	
Scatter Diagrams	129	165-168	
Averages from frequency tables	130a, 130b	54, 55	
Circle Theorems	183	64-65	
Transformations (rotation, reflection, translation, enlargement including negative scale factors)	48-50, 148, 181a/b	104 - 109	
Nets, plans & elevations	51	354	
Volume of spheres and cones	169, 171	359, 361	