



Bishop Challoner Catholic College

Maths Department

Year 11 Mocks: Higher Revision List

Paper 1 (non-calculator): Thursday 1st December 2022

Paper 2 (calculator): Tuesday 6th December 2022

Paper 3 (calculator): Wednesday 14th December 2022

Each paper is 1 hour 30 minutes long. It is recommended that you use your class notes, <http://vle.mathswatch.com> 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: **17aaabbb@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'.

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

| Topic | MathsWatch? | Corbett? | 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? | 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 | | 350, 351 | |

Handling Data and Geometry

| Topic | MathsWatch ? | Corbett? | 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 | |