

## Year 10 Summer Exam 2024 Revision Higher

### Paper 1

Multiply decimals  
Calculating with roots and powers  
Index laws  
Prime factor decomposition  
HCF and LCM  
Calculating the mean  
Construction  
Forming and solving equations  
Reverse percentages  
Real-life graphs  
Area and circumference circles  
Box plots  
Parallel and perpendicular lines  
Similar shapes  
Gradients of non-linear graphs  
Substituting into iterative formulae  
Factorising quadratics  
Quadratic inequalities  
Tree diagrams  
Graphs of trigonometric functions  
The cosine rule  
Equations of circles and tangents  
Simultaneous equations linear and quadratic  
Geometric sequences

### Paper 2

Expanding and factorising  
Changing the subjects of formulae  
Percentage change  
Compound interest  
Solving equations  
Sharing in a ratio  
Bearings  
Volume of cylinders  
Error intervals  
Expanding triple brackets  
Tree diagrams  
Direct and inverse proportion  
Midpoints  
Pythagoras' theorem

Recurring decimals  
Histograms  
Averages  
Sine rule  
Iterative formulas  
Vectors  
Composite and Inverse functions  
Algebraic fractions  
Venn diagrams

### Paper 3

Standard form  
Averages from grouped data  
Inequalities  
Lowest common multiple  
Inverse proportion  
Speed  
Pressure  
Equations of straight line  
Changing the subjects of formulae  
Drawing and interpreting scale diagrams  
Area of sectors  
Cumulative frequency graphs  
Box plots  
 $N^{\text{th}}$  term rule quadratic sequence  
Similar shapes  
Product rule for counting  
Completing the square  
Quadratic formula  
Factorising quadratics  
Enlargement  
Combining transformations  
Volume of composite shapes  
Translating graphs  
Transforming graphs  
Circle theorems  
Error bounds  
Trigonometry and Pythagoras' theorem in 3D