

Maths Feb 2024 PPE Higher Topic Checklist

Paper 1: Non-calculator

| Topic | R | A | G |
|--|---|---|---|
| Lowest common multiples | | | |
| Interior and exterior angles in polygons | | | |
| Calculating midpoints of straight lines | | | |
| Simplifying algebraic expressions | | | |
| Calculations involving powers and roots | | | |
| Describing correlations of graphs | | | |
| Estimations | | | |
| Percentages of amounts | | | |
| Area problems involving ratio | | | |
| Interpreting quadratic graphs | | | |
| Area of circles and sectors | | | |
| Factorising into double brackets | | | |
| Standard form | | | |
| Proving identities | | | |
| Problems involving time and ratio | | | |
| Box plots | | | |
| Medians and quartiles | | | |
| Venn Diagrams | | | |
| Inequality notation | | | |
| Transformations | | | |
| Plotting coordinates to create polygons | | | |
| Converting recurring decimals into fractions | | | |
| Recurring decimal calculation | | | |
| Exact trig values | | | |
| Functions involving composite and inverse | | | |
| Circle theorems | | | |
| Calculations involving surds | | | |
| Perpendicular lines | | | |
| Gradient of lines | | | |
| Geometric progression | | | |
| Index laws, involving fractional and negatives | | | |
| Vectors | | | |
| Trigonometric graphs | | | |

Paper 2: Calculator

| Topic | R | A | G |
|---|---|---|---|
| Expanding single brackets | | | |
| Converting decimals into improper fractions | | | |
| Percentages of amounts | | | |
| Pythagoras Theorem | | | |
| Bearings | | | |
| Problems involving money | | | |
| Fractions of amounts | | | |
| Volume of prisms | | | |
| Average speed calculations | | | |
| Sequences involving algebra | | | |
| Set notation | | | |
| Relative frequency | | | |
| Mean from tables | | | |
| Straight line graphs | | | |
| Scales diagrams | | | |
| Estimation | | | |
| Interpreting inequality notation | | | |
| Cumulative frequency graphs | | | |
| Writing appropriate criticisms | | | |
| Completing the square | | | |
| Direct proportion | | | |
| Rearranging formula | | | |
| Problems involving metric units and conversions | | | |
| Factorising into single brackets | | | |
| Distance time graphs | | | |
| Acceleration calculation | | | |
| Algebraic fractions | | | |
| Similar shapes including volume | | | |
| Iterative problems | | | |
| Functions | | | |
| 3D Pythagoras theorem | | | |
| Product rule of counting | | | |

Paper 3: Calculator

| Topic | R | A | G |
|--|---|---|---|
| Linear sequence | | | |
| Enlargement | | | |
| Error intervals | | | |
| Cubic graphs | | | |
| Percentage increase and decrease | | | |
| Problems with fractions | | | |
| Primes, cubes and squares | | | |
| Recognising recurring decimals | | | |
| Trigonometry | | | |
| Tree diagrams | | | |
| Simultaneous equations | | | |
| Angles in parallel lines | | | |
| Frequency tables | | | |
| Plotting frequency density graphs | | | |
| Volume of frustums | | | |
| Density calculations | | | |
| Vectors | | | |
| Circle theorems | | | |
| Interpreting quadratic graphs | | | |
| Simplifying algebraic fractions | | | |
| Proving congruence | | | |
| Solving equations with unknowns both sides | | | |
| Interpreting graphs | | | |
| Surface area of prisms | | | |
| Area of a triangle using trigonometry | | | |
| Sine and cosine rule | | | |
| Algebraic ratio | | | |
| Probability | | | |
| Column vector notation | | | |
| Equation of straight lines | | | |