

## **Year 7 Higher Maths Exam Topics**

### **NUMBER**

- Simplifying ratio (269)
- Sharing into ratio (270)
- Ratio problems
- Simplifying fractions (146)
- HCF and LCM (218, 219)
- Prime numbers (225)
- Adding, subtracting, multiplying and dividing negative numbers (205, 206, 207)
- Adding, subtracting, multiplying and dividing decimal numbers (90, 91, 92, 93)
- Estimation (215)
- Square and cube numbers (212, 226)
- Square and cube roots (214, 228)
- Mixed to improper fractions (139, 140)
- Fractions of amounts (137)
- Adding, subtracting, multiplying and dividing fractions including mixed numbers (133, 134, 142)
- Ordering numbers (121-131)
- Converting between fractions, decimals and percentages
- Percentages of amounts (234, 235)
- Percentage increase and decrease (238)
- BIDMAS (211)
- Best buy problems (210)
- Rounding to decimal places

### **SHAPE, SPACE AND MEASURE**

- Types of triangles
- Angles in a triangle, straight line, quadrilateral (33, 35, 37)
- Angles in parallel lines (alternate and corresponding) (25)
- Interior and exterior angles of polygons (32)
- Converting between units of measure
- Area of a trapezium (48)
- Area of parallelogram (44)
- Understanding of edges and vertices
- Surface area of a cuboid (310)
- Volume of a prism (356)
- Finding the midpoint of two coordinates (198)
- Pie charts (163, 164)

### **ALGEBRA**

- Simplifying expressions (9)
- Expanding brackets (13)
- Substitution (20)

- Solving equations (110, 113)
- Solving equations including brackets
- Solving equations with unknowns on both sides
- Finding the nth term of sequences (288)
- Writing simple formula (115)
- Simple iteration
- Drawing straight line graphs from a table of values (186)

### **HANDLING DATA**

- Two way tables
- Compound bar graphs (147, 148)
- Dual bar charts
- Mean, median, mode and range and solving problems (50, 53, 56, 57)
- Mean from a frequency table (54)
- Scatter graphs including lines of best fit and predicting (165-167)