

Form 6 Maths – Autumn Exam Checklist and Guidance

- Place value, e.g. What is the value of the 5 in 6542?
- Basic Operations:
 - Add and Subtract (Chimney)
 - Multiplication (column or lattice)
 - Division (Bus stop)
- Lowest terms (simplest form) of fractions, e.g. $\frac{8}{12} = \frac{2}{3}$
- Coordinates. Plotting and reading coordinates. Remember: “Along the corridor, up the stairs!
- Names of common quadrilaterals: rhombus, parallelogram, rectangle, square, trapezium
- Number lines – plot decimals correctly on a given number line and read scales correctly.
- Change between fractions, decimals and percentages, e.g. Change $\frac{7}{20}$ to percentage, 0.9 to fraction, 0.2 to a percentage, 9% to a decimal.
- Data Handling – know how to work out the mode, median and range of a set of data.
- Prime numbers up to 19.
- Square numbers up to 144
- Know what factors and multiples are.
- Convert between units of length, mass and volume, e.g. How many centimetres is 0.4 metres?
- Decimal operations:
 - Hops → Multiply and divide decimals by 10, 100, 1000
 - Hats → Multiply decimals
 - Divide by decimals, e.g. $48 \div 1.2 = 480 \div 12$
- Product of Prime Factors → use the ladder method to find a given number as the product of its prime factors, e.g. $12 = 2^2 \times 3$
- Estimate calculations (add, subtract, multiplication and division), e.g. $407 \div 81, \approx 400 \div 80$
- Sequences → Understand basic number sequences and work out the next few terms.
- Indices →
 - Calculations with squares and cubes, e.g. $2^3 + 4^2$
 - Calculations with square roots and cube roots, e.g. $\sqrt{81} - \sqrt{27}$
- Direct proportion, e.g. 3 cans cost £1.50, find the cost of 5 cans.
- Inverse proportion, 8 workers take 24 days to dig a trench, how many days does it take 16 workers to dig the same trench?
- Fractions of amounts, e.g. $\frac{4}{9}$ of 56 km
- Percentages of amounts, e.g. 60% of 55g