N3

Basic foundation content	Additional foundation content	Higher content only
recognise and use relationships between operations, including inverse operations (eg cancellation to simplify calculations and expressions) use conventional notation for priority of operations, including brackets, powers, roots and reciprocals		

N4

Basic foundation content	Additional foundation content	Higher content only
use the concepts and vocabulary of prime numbers, factors (divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation and the unique factorisation theorem		

Notes: prime factor decomposition including product of prime factors written in index form.

N5

Basic foundation content	Additional foundation content	Higher content only
apply systematic listing strategies		including use of the product rule for counting

Notes: including using lists, tables and diagrams.

N6

Basic foundation content	Additional foundation content	Higher content only
use positive integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5		estimate powers and roots of any given positive number

Notes: including square numbers up to 15 × 15

Students should know that 1000 = 10^3 and 1 million = 10^6

N7

Basic foundation content	Additional foundation content	Higher content only
	calculate with roots, and with integer indices	calculate with fractional indices

N8

Basic foundation content	Additional foundation content	Higher content only
calculate exactly with fractions	calculate exactly with multiples of π	calculate exactly with surds simplify surd expressions involving squares (eg $\sqrt{12} = \sqrt{4 \times 3} = \sqrt{4} \times \sqrt{3} = 2\sqrt{3}$) and rationalise denominators

Notes: see also G17 and G18

N9

Basic foundation content	Additional foundation content	Higher content only
calculate with and interpret standard form $A \times 10^n$, where $1 \leq A < 10$ and n is an integer		

Notes: with and without a calculator.

Interpret calculator displays.

3.1.2 Fractions, decimals and percentages

N10

Basic foundation content	Additional foundation content	Higher content only
work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and $\frac{7}{2}$ or 0.375 and $\frac{3}{8}$)		change recurring decimals into their corresponding fractions and vice versa

Notes: including ordering.