AQA · GCSE · Mathematics

Syllabus Checklist · 大纲自查表

Tick one box per statement: ☐ not yet ☐ nearly ☐ confident. 每条打一个勾：尚未掌握 / 快会了 / 有把握。

1. Number 数论

1.1 Arithmetic, factors, multiples and primes (N1–N4) 算术、因数、倍数及质数（N1–N4）

- ☐☐☐ Order integers, decimals and fractions; use the six inequality and equality symbols.
- ☐☐☐ Apply the four operations with formal written methods to integers, decimals, fractions and mixed numbers, in context including household finance.
- ☐☐☐ Use inverse operations and the priority of operations (BIDMAS).
- ☐☐☐ Use primes, factors, multiples, HCF and LCM via prime factorisation; (H) systematic listing and the product rule for counting.

1.2 Fractions, decimals, percentages and units (N5–N10) 分数、小数、百分数及单位（N5–N10）

- ☐☐☐ Convert between terminating decimals and fractions; (H) recurring decimals to fractions.
- ☐☐☐ Interpret fractions and percentages as operators, using multipliers including reverse percentages.
- ☐☐☐ Use standard units of mass, length, time and money with decimal quantities.

1.3 Indices, surds, standard form and bounds (N11–N16) 指数、根式、科学计数法及取值范围（N11–N16）

- ☐☐☐ Use index laws with integer and (H) fractional indices; calculate with roots.
- ☐☐☐ (H) Simplify surds and rationalise denominators.
- ☐☐☐ Calculate with standard form A x 10^n and interpret calculator displays.
- ☐☐☐ Estimate answers by rounding to one significant figure; round to dp and sf.
- ☐☐☐ (H) Write error intervals in inequality notation and apply upper and lower bounds through calculations.

2. Algebra 代数

2.1 Notation, expressions, substitution, expanding and factorising (A1–A4) 符号表示、代数式、代入、展开及因式分解（A1–A4）

- ☐☐☐ Notation, expressions, substitution, expanding and factorising (A1–A4)

2.2 Equations, inequalities, formulae and rearranging (A5–A7) 方程、不等式、公式及变形（A5–A7）

- ☐☐☐ Equations, inequalities, formulae and rearranging (A5–A7)

2.3 Sequences, including nth term (A24–A25) 数列，包括第 n 项（A24–A25）

- ☐☐☐ Sequences, including nth term (A24–A25)

2.4 Graphs: linear, quadratic, reciprocal, real contexts (A8–A16) 图表：线性、二次、倒数函数及实际应用（A8–A16）

- ☐☐☐ Graphs: linear, quadratic, reciprocal, real contexts (A8–A16)

2.5 Quadratics and simultaneous equations - HT (A17–A23) 二次方程与联立方程 — 高阶（A17–A23）

☐☐☐ Quadratics and simultaneous equations - HT (A17–A23)

3. Ratio, proportion and rates of change 比率、比例及变化率

3.1 Ratio and proportion (R1–R5) 比与比例（R1–R5）

☐☐☐ Ratio and proportion (R1–R5)

3.2 Percentage change, growth and decay (R9–R16) 百分比变化、增长与衰减（R9–R16）

☐☐☐ Percentage change, growth and decay (R9–R16)

3.3 Compound measures and rates of change (R6–R8, R13–R14) 复合度量与变化率（R6–R8，R13–R14）

☐☐☐ Compound measures and rates of change (R6–R8, R13–R14)

4. Geometry and measures 几何与度量

4.1 Angles, parallel lines and polygons (G1–G3) 角度、平行线与多边形（G1–G3）

☐☐☐ Angles, parallel lines and polygons (G1–G3)

4.2 Perimeter, area and volume, including circles (G14–G17, G19) 周长、面积与体积，含圆（G14–G17，G19）

☐☐☐ Perimeter, area and volume, including circles (G14–G17, G19)

4.3 Pythagoras, trigonometry and their graphs (G6, G20–G24) 勾股定理、三角学及其图像（G6，G20–G24）

☐☐☐ Pythagoras, trigonometry and their graphs (G6, G20–G24)

4.4 Transformations, constructions, loci and vectors (G7–G10, G25) 变换、作图、轨迹与向量（G7–G10，G25）

☐☐☐ Transformations, constructions, loci and vectors (G7–G10, G25)

4.5 Properties and congruence and similarity (G4–G5, G18) 性质、全等与相似（G4–G5，G18）

☐☐☐ Properties and congruence and similarity (G4–G5, G18)

5. Probability 概率

5.1 Probability basics and tables (P1–P6) 概率基础与表格（P1–P6）

☐☐☐ Probability basics and tables (P1–P6)

5.2 Tree diagrams and sets - HT (P7–P9) 树状图与集合 – 高阶（P7–P9）

☐☐☐ Tree diagrams and sets - HT (P7–P9)

6. Statistics 统计学

6.1 Sampling, averages and spread (S1–S4) 抽样、平均数与离散程度（S1–S4）

☐☐☐ Sampling, averages and spread (S1–S4)

6.2 Charts, tables, time series and scatter (S2, S5–S6) 图表、表格、时间序列和散点图 (S2, S5–S6)

☐☐☐ Charts, tables, time series and scatter (S2, S5–S6)