IGCSE International 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

C1.1 Types of number 数的类型

☐☐☐ Types of number

C1.2 Sets 集合

☐☐☐ Sets

C1.3 Powers and roots 乘方与开方

☐☐☐ Powers and roots

C1.4 Fractions, decimals and percentages 分数、小数与百分数

☐☐☐ Fractions, decimals and percentages

C1.5 Ordering 排序

☐☐☐ Ordering

C1.6 The four operations 四则运算

☐☐☐ The four operations

C1.7 Indices I 指数 I

☐☐☐ Indices I

C1.8 Standard form 科学记数法

☐☐☐ Standard form

C1.9 Estimation 估算

☐☐☐ Estimation

C1.10 Ratio and proportion 比与比例

☐☐☐ Ratio and proportion

C1.11 Rates 比率

☐☐☐ Rates

C1.12 Percentages 百分数

☐☐☐ Percentages

C1.13 Using a calculator 计算器的使用

☐☐☐ Using a calculator

C1.14 Time 时间

☐☐☐ Time

C1.15 Money 货币

☐☐☐ Money

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E1.15 Money 货币

☐☐☐ Money

E1.16 Exponential growth and decay 指数增长与衰减

☐☐☐ Exponential growth and decay

E1.17 Surds 无理根式

☐☐☐ Surds

2. Algebra 代数

C2.1 Introduction to algebra 代数入门

☐☐☐ Introduction to algebra

C2.2 Algebraic manipulation 代数式运算

☐☐☐ Algebraic manipulation

C2.3 Algebraic fractions 分式

☐☐☐ Algebraic fractions

C2.4 Indices II 指数 II

☐☐☐ Indices II

C2.5 Equations 方程

☐☐☐ Equations

C2.6 Inequalities 不等式

☐☐☐ Inequalities

C2.7 Sequences 数列

☐☐☐ Sequences

E2.1 Introduction to algebra 代数入门

☐☐☐ Introduction to algebra

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E2.6 Inequalities 不等式

☐☐☐ Inequalities

E2.7 Sequences 数列

☐☐☐ Sequences

E2.8 Proportion 比例关系

☐☐☐ Proportion

3. Functions 函数

C3.1 Graphs of functions 函数图像

☐☐☐ Graphs of functions

C3.2 Sketching graphs on a calculator 使用计算器绘制函数图像

☐☐☐ Sketching graphs on a calculator

C3.3 Functions 函数

☐☐☐ Functions

E3.1 Graphs of functions 函数图像

☐☐☐ Graphs of functions

E3.2 Sketching graphs on a calculator 使用计算器绘制函数图像

☐☐☐ Sketching graphs on a calculator

E3.3 Functions 函数

☐☐☐ Functions

E3.4 Finding a quadratic function using given information 根据已知条件求二次函数

☐☐☐ Finding a quadratic function using given information

E3.5 Asymptotes 渐近线

☐☐☐ Asymptotes

E3.6 Transforming graphs of functions 函数图像的变换

☐☐☐ Transforming graphs of functions

E3.7 The logarithmic function 对数函数

☐☐☐ The logarithmic function

4. Coordinate geometry 坐标几何

C4.1 Coordinates 坐标

☐☐☐ Coordinates

C4.2 Gradient of linear graphs 直线的斜率

☐☐☐ Gradient of linear graphs

C4.3 Length and midpoint 线段长度与中点

☐☐☐ Length and midpoint

C4.4 Equations of linear graphs 直线方程

☐☐☐ Equations of linear graphs

C4.5 Parallel lines 平行线

☐☐☐ Parallel lines

E4.1 Coordinates 坐标

☐☐☐ Coordinates

E4.2 Gradient of linear graphs 直线的斜率

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☐☐☐ Length and midpoint

E4.4 Equations of linear graphs 直线方程

☐☐☐ Equations of linear graphs

E4.5 Parallel lines 平行线

☐☐☐ Parallel lines

E4.6 Perpendicular lines 垂直线

☐☐☐ Perpendicular lines

5. Geometry 几何

C5.1 Geometrical terms 几何术语

☐☐☐ Geometrical terms

C5.2 Angle measurement in degrees 角的度量

☐☐☐ Angle measurement in degrees

C5.3 Similarity 相似

☐☐☐ Similarity

C5.4 Symmetry 对称

☐☐☐ Symmetry

C5.5 Angles 角

☐☐☐ Angles

C5.6 Circle theorems I 圆的定理 I

☐☐☐ Circle theorems I

C5.7 Circle theorems II 圆的定理 II

☐☐☐ Circle theorems II

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☐☐☐ Circle theorems I

E5.7 Circle theorems II 圆的定理 II

☐☐☐ Circle theorems II

6. Mensuration 几何度量

C6.1 Units of measure 计量单位

☐☐☐ Units of measure

C6.2 Area and perimeter 面积与周长

☐☐☐ Area and perimeter

C6.3 Circles, arcs and sectors 圆、圆弧与扇形

☐☐☐ Circles, arcs and sectors

C6.4 Surface area and volume 表面积与体积

☐☐☐ Surface area and volume

C6.5 Compound shapes and parts of shapes 组合图形与图形的一部分

☐☐☐ Compound shapes and parts of shapes

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☐☐☐ Units of measure

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☐☐☐ Surface area and volume

E6.5 Compound shapes and parts of shapes 组合图形与图形的一部分

☐☐☐ Compound shapes and parts of shapes

7. Trigonometry 三角学

C7.1 Pythagoras' theorem 勾股定理

☐☐☐ Pythagoras' theorem

C7.2 Right-angled triangles 直角三角形

☐☐☐ Right-angled triangles

E7.1 Pythagoras' theorem 勾股定理

☐☐☐ Pythagoras' theorem

E7.2 Right-angled triangles 直角三角形

☐☐☐ Right-angled triangles

E7.3 Exact trigonometric values 三角函数的精确值

☐☐☐ Exact trigonometric values

E7.4 Trigonometric functions 三角函数

☐☐☐ Trigonometric functions

E7.5 Non-right-angled triangles 非直角三角形

☐☐☐ Non-right-angled triangles

E7.6 Pythagoras' theorem and trigonometry in 3D 勾股定理与三角学在三维空间中的应用

☐☐☐ Pythagoras' theorem and trigonometry in 3D

8. Transformations and vectors 变换与向量

C8.1 Transformations 变换

☐☐☐ Transformations

E8.1 Transformations 变换

☐☐☐ Transformations

E8.2 Vectors in two dimensions 二维向量

☐☐☐ Vectors in two dimensions

E8.3 Magnitude of a vector 向量的模

☐☐☐ Magnitude of a vector

9. Probability 概率

C9.1 Introduction to probability 概率入门

☐☐☐ Introduction to probability

C9.2 Relative and expected frequencies 相对频率与期望频数

☐☐☐ Relative and expected frequencies

C9.3 Probability of combined events 复合事件的概率

☐☐☐ Probability of combined events

E9.1 Introduction to probability 概率入门

☐☐☐ Introduction to probability

E9.2 Relative and expected frequencies 相对频率与期望频数

☐☐☐ Relative and expected frequencies

E9.3 Probability of combined events 复合事件的概率

☐☐☐ Probability of combined events

10. Statistics 统计

C10.1 Classifying statistical data 统计数据的分类

☐☐☐ Classifying statistical data

C10.2 Interpreting statistical data 统计数据的解读

☐☐☐ Interpreting statistical data

C10.3 Discrete and continuous data 离散数据与连续数据

☐☐☐ Discrete and continuous data

C10.4 Averages and range 平均数与极差

☐☐☐ Averages and range

C10.5 Averages on a calculator 使用计算器求平均数

☐☐☐ Averages on a calculator

C10.6 Statistical charts and diagrams 统计图表

☐☐☐ Statistical charts and diagrams

C10.7 Scatter diagrams 散点图

☐☐☐ Scatter diagrams

E10.1 Classifying statistical data 统计数据的分类

☐☐☐ Classifying statistical data

E10.2 Interpreting statistical data 统计数据的解读

☐☐☐ Interpreting statistical data

E10.3 Discrete and continuous data 离散数据与连续数据

☐☐☐ Discrete and continuous data

E10.4 Averages and measures of spread 平均数与离散程度的度量

☐☐☐ Averages and measures of spread

E10.5 Averages on a calculator 使用计算器求平均数

☐☐☐ Averages on a calculator

E10.6 Statistical charts and diagrams 统计图表

☐☐☐ Statistical charts and diagrams

E10.7 Scatter diagrams 散点图

□□□ Scatter diagrams

E10.8 Cumulative frequency diagrams 累积频数图

□□□ Cumulative frequency diagrams