

2022 年「學而思盃」P4 比賽大綱

本次比賽分為甲、乙、丙三部分。

甲部有 15 題，每題 2 分

乙部有 15 題，每題 4 分

丙部有 10 題，每題 6 分

比賽時間 60mins，共 40 題，滿分 150 分。

板塊	知識點
計算板塊	1. 第五種運算 2. 平方差公式 3. 平方和公式
計數板塊	1. 加乘原理
應用題板塊	1. 雞兔同籠 2. 頁碼問題 3. 平均數問題
圖形板塊	1. 平行四邊形與梯形
數論板塊	1. 質因數分解 2. 大因與小倍 3. 整除特徵中的餘數問題
組合板塊	1. 最值問題
行程板塊	1. 路程速度與時間 2. 相遇與追及

*英文版僅作參考，以中文版為準。

2022 「Think Mathematics Competition」 P4's Outline

The competition is divided into three parts: A, B and C.

Section A: 1st to 15th Question (Each carries 2 marks)

Section B: 16th to 30th Question (Each carries 4 marks)

Section C: 31th to 40th Question (Each carries 6 marks)

The time is 60mins, with a total of 40 questions and a full score of 150 marks.

Modules	Knowledge
Calculation Modules	<ol style="list-style-type: none"> 1. Exponentiation of Powers 2. Difference of Squares 3. $1^2+2^2+3^2+\dots+n^2=1/6n(n+1)(n+2)$
Counting Modules	<ol style="list-style-type: none"> 1. Law of Addition and Multiplication
Word Problem Modules	<ol style="list-style-type: none"> 1. Chicken-Rabbit Problems 2. Page Problem 3. Questions Involving Average
Geometry Modules	<ol style="list-style-type: none"> 1. Parallelogram and Trapezoid
Number Theory Modules	<ol style="list-style-type: none"> 1. Prime Factorization 2. The Greatest Common Factors and Least Common Multiples 3. Remainder Problems
Combinatorics	<ol style="list-style-type: none"> 1. Problems Involving Extreme Value
Distance Word Problems	<ol style="list-style-type: none"> 1. Distance, Time and Speed 2. Chasing and Meeting Problems

**English version is for reference only, the Chinese version shall prevail.*