



# MathConceptition

## 2022

# P3

# Question Booklet

## 問題簿

Name:

姓名：

Reg. No.:

登記編號：

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Time: 50 Minutes

Calculators are NOT permitted.

### Instructions:

1. DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Write your name and registration number on the cover of this question booklet.
3. If the information printed on your answer sheet is not correct, please inform the invigilator immediately.
4. Please use a pencil and write your answers neatly ONLY on the answer sheet provided. DO NOT write or draw in the circle next to each answer box. No mark will be given if you failed to follow this instruction.
5. Unless otherwise specified, all answers must be in exact value and in its simplest form. Writing the units for the answers is NOT necessary.
6. Rough-work sheets provided will be collected at the end of the contest but they will not be marked.
7. Diagrams in this question booklet are not necessarily drawn to scale.

限時：50 分鐘

不允許使用計算機。

### 比賽須知：

1. 未宣布開始前，切勿翻閱此問題簿。
2. 請在此問題簿封面的適當位置寫上你的姓名及登記編號。
3. 請核對答題紙上列出的資料是否與你相符。如有問題，請舉手。
4. 所有答案必須寫在答題紙內，並須用鉛筆作答。請勿填寫或畫花題號後方的圓圈，否則該題答案將會作廢。
5. 除非題目特別表明，所有答案均不需填寫單位，但必須以準確數值及最簡方式表示。
6. 比賽完結時監考員會收回桌上的草稿紙，但草稿紙上所書寫的任何文字或圖表將不獲評閱。
7. 此問題簿的附圖不一定依比例繪成。

- 1)  $84 + 26 = ?$  [1%]
- 2)  $283 + 167 = ?$  [1%]
- 3)  $102 - 14 = ?$  [1%]
- 4)  $701 - 283 = ?$  [1%]
- 5)  $15 \times 8 = ?$  [1%]
- 6)  $23 \times 7 = ?$  [1%]
- 7)  $288 \div 9 = ?$  [1%]
- 8)  $162 \div 6 = ?$  [1%]
- 9)  $1 + 3 + 5 + 7 + \dots + 21 = ?$  [1%]
- 10)  $85 + 19 + 19 + 19 + 19 + 19 = ?$  [1%]
- 11)  $13 - 39 + 47 - 10 = ?$  [1%]
- 12)  $263 + 326 + 632 = ?$  [1%]
- 13)  $9 \times 15 + 7 \times 21 - 8 \times 24 = ?$  [1%]
- 14)  $125 \times 7 \times 4 \times 8 \times 25 = ?$  [1%]
- 15)  $12 \times 63 + 12 \times 56 - 19 \times 12 = ?$  [1%]

- 16) Find the missing number.

[2%]

找出橫線上的數字。

4 minutes and 24 seconds = \_\_\_\_\_ seconds

4 分鐘 24 秒 = \_\_\_\_\_ 秒

- 
- 17) An apple costs \$4. An orange is \$2 more expensive than an apple. How much do 18 apples and 15 oranges cost?

[2.1%]

一個蘋果售 4 元。一個橙比一個蘋果貴 2 元。問 18 個蘋果和 15 個橙共售多少元？

- 18) A sandwich costs \$18. Tim has \$50. If he wants to buy 4 sandwiches, how much more does he need? [2.2%]

一件三文治售 18 元。家明有 50 元，如果他想要買 4 件三文治，他還需要多少元？

- 
- 19) A teacher has 50 candies. If he wants to divide all the candies equally among 8 students, at least how many more candies does the teacher need to buy? [2.3%]

老師有糖果 50 粒，如果要把全部糖果平均分給 8 名學生，老師最少要多買糖果多少粒？

- 
- 20) A has \$75 more than B. C has \$93 less than B. If B has \$99, how much more does A have than C? [2.4%]

甲比乙多 75 元，丙比乙少 93 元。如果乙有 99 元，甲比丙多多少元？

- 21) A quadrilateral has only one pair of parallel lines. It is a/an [2.5%]  
\_\_\_\_\_?

一個四邊形只有一組平行線，這是一個 \_\_\_\_\_。

- 
- 22) The bus departs every 25 minutes. Tiffany arrives at the [2.6%]  
bus stop at 08 : 45 but the previous bus has left the stop at  
08 : 37. How many minutes does Tiffany have to wait for  
the next bus?

巴士每 25 分鐘開出一班。小寧在 08 : 45 到達巴士  
站但上一班巴士已於 08 : 37 離開了。她要等多少分  
鐘才可乘搭下一班巴士？

- 23) Peter's father is 22 years older than Peter. If the sum of their ages after 8 years will be 56, how old is Peter now? [2.7%]

建輝的爸爸比建輝大 22 歲。如果 8 年後，他們二人的總歲數是 56，建輝今年多少歲？

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- 24) There were some apples in a fruit shop. On the first day, the store sold half of all the apples. On the second day, the store sold half of the remaining apples. On the third day, the store sold 28 apples and all the apples are sold. How many apples did the shop have originally? [2.8%]

水果店有一批蘋果。第一天，水果店賣去了全部蘋果的一半。第二天，水果店賣去了餘下蘋果的一半。第三天，水果店賣去了 28 個蘋果，便把全部蘋果賣完了。水果店原有蘋果多少個？

- 25) Edmond went to bed at 22 : 15 last night. He waked up at 06 : 35 this morning. How many minutes had he slept? [2.9%]

嘉謙在 22 : 15 上床睡覺，第二日 06 : 35 起床。他總共睡了多少分鐘？

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- 26) If the sum of all digits of a 5-digit even number is 28, what is the largest possible value of the number? [3.0%]

一個五位雙數的各數字之和是 28，這個數最大是多少？

- 27) A number times 6, then minus 6, then divided by 6, then plus 6 and the answer is 100. What is the original value of this number? [3.1%]

有一個數，乘以 6，再減去 6，再除以 6，最後加 6，答案剛好是 100。這個數原本是多少？

- 
- 28) The sum of 4 consecutive odd numbers is 224. Find the value of the smallest odd number. [3.2%]

如果 4 個連續單數的和是 224，求 4 個數中最小的一個數。

- 29) The number of Chinese books is 200 more than that of English books. The number of Chinese books is 5 times that of English books. What is the number of English books? [3.3%]

中文書比英文書多 200 本。中文書的數目是英文書的 5 倍。有英文書多少本？

- 
- 30) A mathematics lesson lasts for 55 minutes. Jeff can solve a mathematics question every 6 minutes. However, he needs to rest for 1 minute before starting another question. At most how many questions can Jeff solve in the mathematics lesson? [3.4%]

每節數學課有 55 分鐘。俊傑每 6 分鐘可以完成一條數學題。可是，他必須休息 1 分鐘才能繼續計算下一條。一節數學課中，俊傑最多可完成多少條數學題？

- 31) If today is Saturday, which day of the week is it after 500 days? [4.0%]

假設今天是星期六，500 日後是星期幾？

- 
- 32) There are four \$10 notes, four \$20 notes, four \$50 notes and four \$100 notes. With at least one note used, how many different values can be formed by using these notes? [4.1%]

如果只有 10 元、20 元、50 元、100 元四種紙幣各 4 張，在至少使用一張紙幣的情況下，共可組成多少種不同價值的組合？

- 33) A teacher has some candies. If each student gets 6 candies, 35 candies are left. If each student gets 8 candies, 9 more candies are needed. How many students are there? [4.2%]

老師有一些糖果。如果分給每位同學 6 粒糖果，還餘下 35 粒糖果。如果分給每人 8 粒糖果，還欠 9 粒糖果。問有同學多少位？

- 
- 34) To cut a wooden stick into 5 pieces, 20 minutes are needed. To cut a wooden stick into 30 pieces, how many minutes are needed? [4.3%]

將一根木棍鋸成 5 段，需時 20 分鐘。將一根木棍鋸成 30 段，需時多少分鐘？

- 35) There are some chickens and pigs in a farm. If there are 43 heads and 118 legs in the farm, what is the number of chickens in the farm? [4.4%]

農場內有雞和豬，共有 43 個頭、118 條腿，農場共有雞多少隻？

- 
- 36) Tim and Peter joined a burger eating competition. Tim can finish a burger every 6 seconds and Peter can finish a burger every 9 seconds. After how many seconds from the start of the competition, the number of burgers eaten by Tim is 10 more than that by Peter? [4.5%]

小明和小輝參加了大胃王比賽，小明每 6 秒可吃完一個漢堡，小輝每 9 秒可吃完一個漢堡。比賽開始後多少秒，小明已吃完的漢堡的數量會比小輝多 10 個？

- 37) At least how many students are needed to ensure that at least 5 students' birthdays are in the same month? [4.6%]

最少要有多少名學生才可確保至少有 5 名學生的生日月份是同一個月？

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- 38) There are 144 coins and one of them is lighter than the others. With the help of a weight balance, at least how many times should the balance be used to find out the lighter coin? [4.7%]

有 144 個金幣，其中一個金幣的重量較其他輕。現有天秤一個，最少需要使用天秤多少次，才可確保找出那個較輕的金幣？

- 39) There are 308 oranges. If these oranges are divided [4.8%]  
into certain numbers of groups and the numbers of  
oranges in these groups are all different, at most how  
many groups can be formed?

有 308 個橙，如果要把這些橙分成若干堆，而每  
一堆橙的數目都不同，最多可分成多少堆？

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- 40) Writing all the natural numbers in order like [4.9%]  
“123456789101112...”, what is the 2022<sup>nd</sup> number?

依次將自然數順序寫出如下：123456789101112...，  
第 2022 個數字是什麼？

End of paper  
全卷完



REG NO			P3
NAME			
GROUP			
SEAT			

ANSWER SHEET

ANSWER		ANSWER		ANSWER		ANSWER	
1 110	<input type="radio"/>	11 11	<input type="radio"/>	21 梯形 Trapezium	<input type="radio"/>	31 星期二 Tuesday	<input type="radio"/>
2 450	<input type="radio"/>	12 1221	<input type="radio"/>	22 17	<input type="radio"/>	32 72	<input type="radio"/>
3 88	<input type="radio"/>	13 90	<input type="radio"/>	23 9	<input type="radio"/>	33 22	<input type="radio"/>
4 418	<input type="radio"/>	14 700000	<input type="radio"/>	24 112	<input type="radio"/>	34 145	<input type="radio"/>
5 120	<input type="radio"/>	15 1200	<input type="radio"/>	25 500	<input type="radio"/>	35 27	<input type="radio"/>
6 161	<input type="radio"/>	16 264	<input type="radio"/>	26 99910	<input type="radio"/>	36 180	<input type="radio"/>
7 32	<input type="radio"/>	17 162	<input type="radio"/>	27 95	<input type="radio"/>	37 49	<input type="radio"/>
8 27	<input type="radio"/>	18 22	<input type="radio"/>	28 53	<input type="radio"/>	38 5	<input type="radio"/>
9 121	<input type="radio"/>	19 6	<input type="radio"/>	29 50	<input type="radio"/>	39 24	<input type="radio"/>
10 180	<input type="radio"/>	20 168	<input type="radio"/>	30 8	<input type="radio"/>	40 0	<input type="radio"/>