



MathConceptition

2024

P1

Question Booklet

問題簿

Time: 50 Minutes
Calculators are NOT permitted.

Instructions:

1. **DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.**
2. **If the information printed on your answer sheet is not correct, please inform the invigilator immediately.**
3. **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.**
4. **Unless otherwise specified, all answers must be in exact value and in its simplest form. Writing the units for the answers is NOT necessary.**
5. **Rough-work sheets provided will be collected at the end of the contest but they will not be marked.**
6. **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. **請核對答題紙上列出的資料是否與你相符。如有問題，請舉手。**
3. **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。**
4. **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。**
5. **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。**
6. **此問題簿的附圖不一定依比例繪成。**

- 1) $10 + 6 = ?$ [1%]
- 2) $27 + 2 = ?$ [1%]
- 3) $4 + 16 = ?$ [1%]
- 4) $20 - 19 = ?$ [1%]
- 5) $17 - 8 = ?$ [1%]
- 6) $3 + 9 + 14 = ?$ [1%]
- 7) $6 + 15 + 2 = ?$ [1%]
- 8) $3 + 16 + 26 = ?$ [1%]
- 9) $36 - 15 - 6 = ?$ [1%]
- 10) $29 - 15 - 9 = ?$ [1%]
- 11) $34 - 19 - 8 = ?$ [1%]
- 12) $30 + 18 - 18 = ?$ [1%]
- 13) $15 + 29 - 35 = ?$ [1%]
- 14) $41 - 27 + 6 = ?$ [1%]
- 15) $61 - 32 + 14 - 24 = ?$ [1%]

16) Count backwards from 29, what is the next number? [2%]

從 29 開始倒數，下一個數字是甚麼？

MathConcept Education
All Rights Reserved

17) How many odd numbers are there below? [2.1%]

下列數字中有多少個奇數？

80, 35, 15, 54, 89, 90, 36, 31, 5, 79

For Internal Use Only
Not For Sale

- 18) How many letters below are only formed by straight line(s)? [2.2%]

以下共有多少個字母只由直線組成？

A B C D E F G H I

J K L M N O P Q

R S T U V W X Y Z

- 19) Find the missing number. [2.3%]

找出橫線上的數字。

42, ?, 28, 21, 14, 7, ...

For Internal Use Only
Not For Sale

- 20) Fill in '+' or '-' in each box to make the calculation valid. [2.4%]
(Write only the symbols in a correct order on the answer sheet)

在方格中填寫「+」或「-」，使算式成立。
(只需將符號順次序寫在答案紙上)

$$20 \quad \square \quad 7 \quad \square \quad 11 \quad \square \quad 5 \quad = \quad 19$$

- 21) Today is Tuesday. Which day of the week was it 9 days ago? [2.5%]

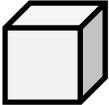
今天是星期二。9天前是星期幾？

22) If ☺ and ◇ each represents a number, ◇ = ___?___ [2.6%]

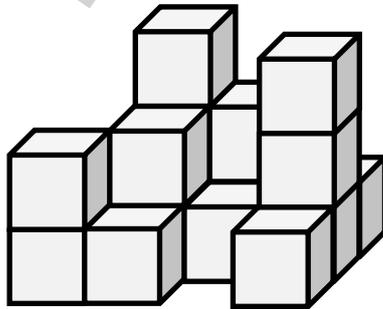
如果 ☺ 及 ◇ 各代表一個數字，◇ = ___?___。

$$\text{☺} + \text{◇} = 24$$

$$\text{☺} - \text{◇} = 12$$

23) At least how many  are needed to build the solid below? [2.7%]

要砌出以下立體最少需要  多少粒？



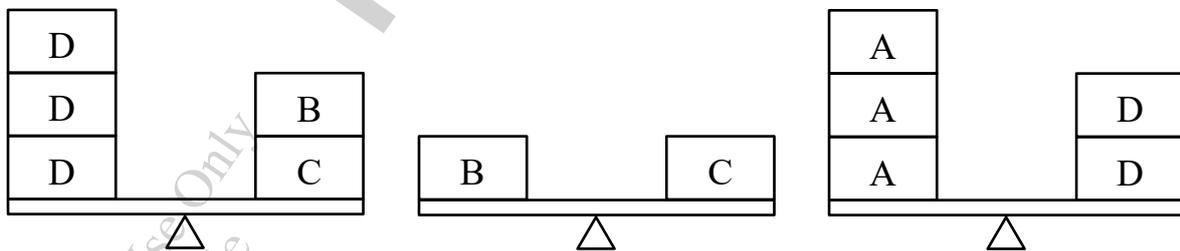
For Internal Use Only
Not For Sale

- 24) Thomas had \$98 originally. After Thomas bought a \$30 breakfast, [2.8%]
Mary gave Thomas \$20. However, Thomas lost some money and
he has \$59 left now. How much did Thomas lose?

小耀原本有 98 元。小耀買了 30 元的早餐後，小麗給了小耀
20 元。然後，小耀遺失了一些錢，現在只剩下 59 元。小耀遺
失了多少元？

- 25) Which of the following boxes is the lightest? [2.9%]
Write down the representing letter only.

以下哪個箱子最輕？只需寫下所代表的字母。



- 26) What is the smallest 3-digit odd number that can be formed with the number cards below? [3%]

用以下數字卡可組成的最小三位奇數是多少？



-
- 27) How many even numbers are there from 9 to 69? [3.1%]
由 9 至 69，共有多少個偶數？

For Internal Use Only
Not For Sale

- 28) A teacher is assigning 25 students into groups. The first student goes to group A, the second goes to group B, the third goes to group C, the fourth goes to group A, the fifth goes to group B, the sixth goes to group C, and so on. How many students are there in group B? [3.2%]

老師正為 25 個學生分組。第一個學生分到 A 組，第二個分到 B 組，第三個分到 C 組，第四個分到 A 組，第五個分到 B 組，第六個分到 C 組，如此類推。B 組中有多少個學生？

-
- 29) Find the missing number. [3.3%]

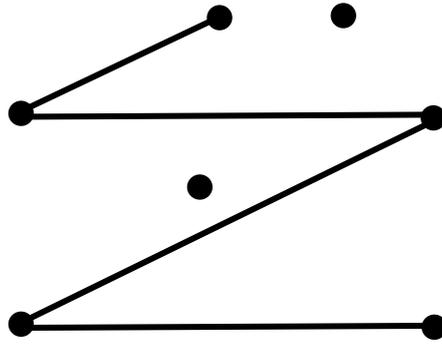
找出橫線上的數字。

$$43 - 7 = \underline{\quad ? \quad} - 14$$

For Internal Use Only
Not For Sale

- 30) If any two dots can be linked up with 1 line segment only, then [3.4%]
how many more line segments can be added to the figure below?

如果任何兩點只可以用 1 條線段連起來，那麼下圖中還可以多加多少條線段？



- 31) After cutting the cake below from the top to the bottom three times vertically, at most how many pieces can we have? [4%]

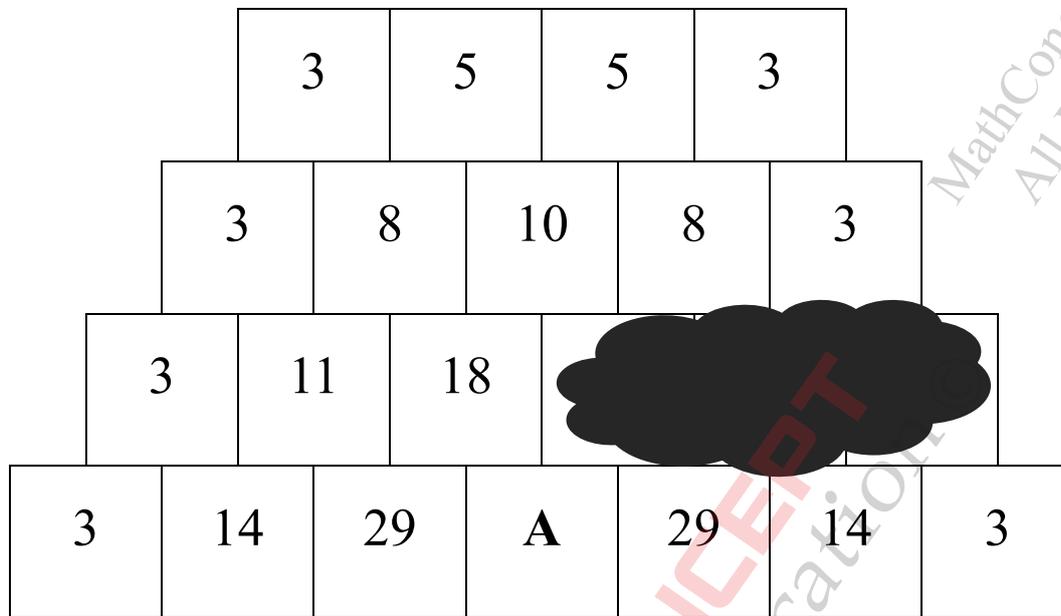
把下圖的蛋糕由上至下垂直切三次後，最多可被分成多少件？



For Internal Use Only
Not For Sale

- 32) Find the number represented by **A** in the pattern. [4.1%]

根據規律，找出 **A** 所代表的數字。



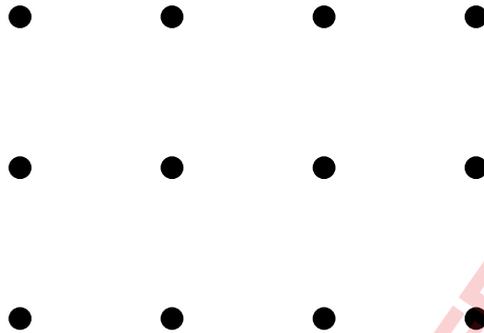
- 33) Some children form a queue. In the queue, Mary is in 11th place counting from the left and Thomas is in 7th place counting from the right. There are 4 children between Mary and Thomas. At least how many children are there in the queue? [4.2%]

一些小孩在排隊。在該隊伍中，從左邊數起第 11 個是小麗，且從右邊數起第 7 個是小耀。小麗和小耀之間有 4 個小孩。該隊伍中最少有多少個小孩？

For Internal Use Only
Not For Sale

- 34) By choosing four points to be the vertices of a square, how many squares can be drawn from the points in the figure? [4.3%]

選取四點作為頂點連成一個正方形，圖中的點最多可以畫出多少個正方形？



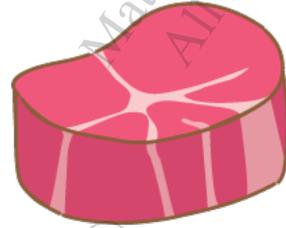
- 35) 19 years ago, Katy was 28 years old. Her brother is 5 years older than her. What is the sum of their ages now? [4.4%]

嘉嘉 19 年前是 28 歲。她的哥哥比她大 5 歲。現在，他們的歲數之和是多少？

For Internal Use Only
Not For Sale

- 36) It is known that 1 catty equals to 16 taels. If each catty of pork costs 32 dollars, how much does 2 catties and 8 taels of pork cost in dollars? [4.5%]

已知 1 斤等於 16 兩。若每斤豬肉售 32 元，那麼買 2 斤 8 兩的豬肉需付多少元？



-
- 37) What is the units digit of $12 + 14 + 16 + 18 + \dots + 2022 + 2024$? [4.6%]

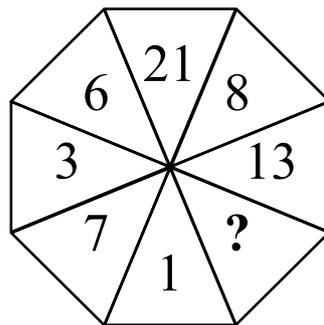
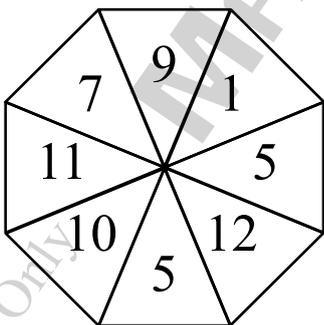
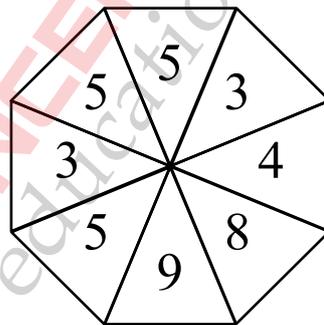
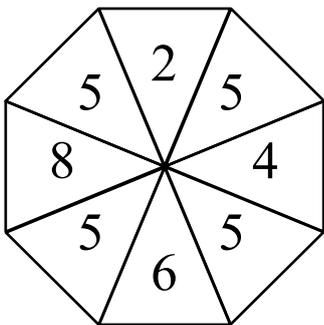
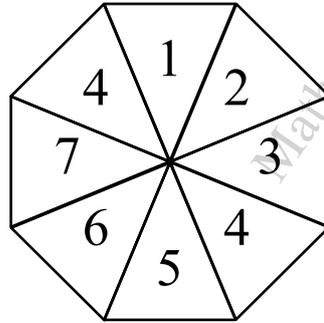
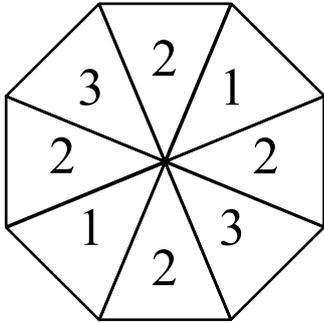
$12 + 14 + 16 + 18 + \dots + 2022 + 2024$ 的個位數是多少？

For Internal Use Only
Not For Sale

38) Solve the following puzzle.

[4.7%]

解以下謎題。



For Internal Use Only
Not For Sale

- 39) Find the missing number. [4.8%]

找出橫線上的數字。

$$4 \odot 2 = 9$$

$$3 \odot 4 = 10$$

$$5 \odot 1 = 8$$

$$8 \odot 3 \odot 1 = 28 \odot 1 = 54$$

$$2 \odot 6 \odot 9 = \underline{\quad ? \quad}$$

- 40) There are 2 staff in a fast food shop. It takes 1 minute for each [4.9%]

customer to place an order with a staff. After receiving an order, a staff will prepare the meals one by one, and the staff cannot take orders from customers at the same time. The time required to prepare different meals are below:

在一間快餐店有 2 名員工。每名顧客向員工點餐需時 1 分鐘。收到訂單後，員工會逐一製作餐點，但製作餐點的員工不能同時接受顧客點餐。以下為製作不同餐點所需的時間：

Meal 餐點	A	B	C
Preparation time (minutes) 製作時間 (分鐘)	2	3	5

There are 6 customers placing orders, with 3 orders for meal A, 2 orders for meal B, and 1 order for meal C. At least how many minutes will it take to complete all the orders? (Including ordering and preparing time.)

現有 6 名顧客點餐，分別點了 3 份 A 餐，2 份 B 餐和 1 份 C 餐，最少需要多少分鐘才能完成所有訂單？（包括點餐及製作時間）

End of paper
全卷完

MathConcept Education
All Rights Reserved

Blank page
空白頁

MATHCONCEPT
education ©

For Internal Use Only
Not For Sale



REG NO			P1
NAME			
GRADE			
SEAT			

ANSWER SHEET

IDCHECK

ABSENT

ANSWER		ANSWER		ANSWER		ANSWER					
1	16	<input type="radio"/>	11	7	<input type="radio"/>	21	星期日 Sunday	<input type="radio"/>	31	7	<input type="radio"/>
2	29	<input type="radio"/>	12	30	<input type="radio"/>	22	6	<input type="radio"/>	32	36	<input type="radio"/>
3	20	<input type="radio"/>	13	9	<input type="radio"/>	23	16	<input type="radio"/>	33	12	<input type="radio"/>
4	1	<input type="radio"/>	14	20	<input type="radio"/>	24	29	<input type="radio"/>	34	10	<input type="radio"/>
5	9	<input type="radio"/>	15	19	<input type="radio"/>	25	A	<input type="radio"/>	35	99	<input type="radio"/>
6	26	<input type="radio"/>	16	28	<input type="radio"/>	26	407	<input type="radio"/>	36	80	<input type="radio"/>
7	23	<input type="radio"/>	17	6	<input type="radio"/>	27	30	<input type="radio"/>	37	6	<input type="radio"/>
8	45	<input type="radio"/>	18	15	<input type="radio"/>	28	8	<input type="radio"/>	38	17	<input type="radio"/>
9	15	<input type="radio"/>	19	35	<input type="radio"/>	29	50	<input type="radio"/>	39	60	<input type="radio"/>
10	5	<input type="radio"/>	20	--+-	<input type="radio"/>	30	17	<input type="radio"/>	40	12	<input type="radio"/>

