



香港國際數學競賽晉級賽 2019
HONG KONG INTERNATIONAL
MATHEMATICAL OLYMPIAD SEMI-FINAL 2019

Primary 1
小學一年級

Question paper
試題

填空題 (第 1 至 25 題) (每題 4 分, 答錯及空題不扣分)

Open-Ended Questions (1st ~25th) (4 points for correct answer, no penalty point for wrong answer)

Semi-Final

Logical Thinking

邏輯思維

1. If yesterday was Thursday, which day of the week will 6 days later be?
昨天是星期四, 問六天後是星期幾?
2. Peter's father has 4 sons and he has 5 brother(s) and sister(s). How many daughter(s) does Peter's father have?
彼德的爸爸有 4 個兒子, 而他有 5 個兄弟姐妹, 問爸爸有多少個女兒?
3. 20 children form a column. Alice is the 5th starting from the front. How many children behind her?
20 個小孩排成一列, 愛麗絲排第 5 名, 那麼她身後有多少個小孩?

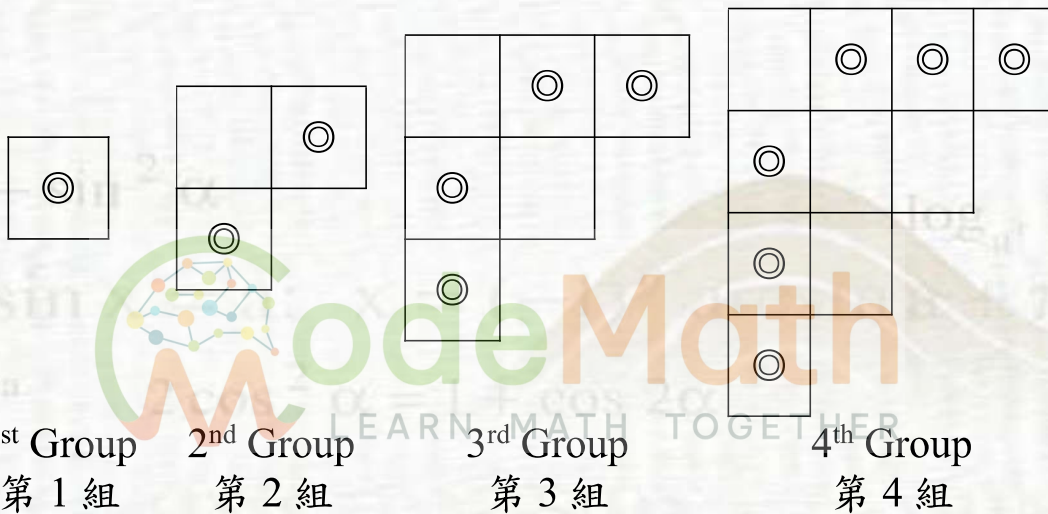
4. According to the pattern shown below, what is the number in the blank?

按以下規律，求在橫線上的數字。

9、17、25、33、41、49、 、....

5. According to the pattern shown below, how many ◎ is / are there in the 13th group?

按以下規律，問第 13 組有多少個 ◎？



Question 5
第 5 題



Arithmetic

算術

6. Find the value of $2 + 6 + 13 + 14 + 17 + 28$.
求 $2 + 6 + 13 + 14 + 17 + 28$ 的值。
7. Find the value of $13 - 21 + 17$.
求 $13 - 21 + 17$ 的值。
8. Find the value of $1 - 2 - 3 - 4 - 5 + 6 + 7 + 8 + 9$.
求 $1 - 2 - 3 - 4 - 5 + 6 + 7 + 8 + 9$ 的值。
9. What is the number that should be filled in the blank if the equation below is correct?
在以下算式填上甚麼數字會使算式正確?
 $41 - \underline{\hspace{2cm}} = 22$
10. Refer to the puzzle, find the value of A .
參考算式，求 A 的值。

$$\begin{array}{r}
 2 \quad 7 \\
 A \\
 - \\
 \hline
 A
 \end{array}$$

Number Theory

數論

11. Alice has 15 pencils and Peter has 7 pencils. How many pencil(s) does Peter have to ask Alice to give him to make Peter has 2 more pencils than Alice?

愛麗絲有 15 支鉛筆，彼德有 7 支鉛筆。要使彼德比愛麗絲多 2 支鉛筆，彼德要問愛麗絲取多少支鉛筆？

12. Fill the lines with ‘+’ and ‘-’ to make the equation below correct. (Write down the complete equation in the answer sheet)

在橫線上填上加號或減號，使下列算式正確。（在答題紙上寫上完整算式）

$$2 \quad \underline{\quad} \quad 7 \quad \underline{\quad} \quad 5 \quad \underline{\quad} \quad 1 = 5$$

13. Fill the lines with ‘+’ and ‘-’ to make the equation below correct. (Write down the complete equation in the answer sheet)

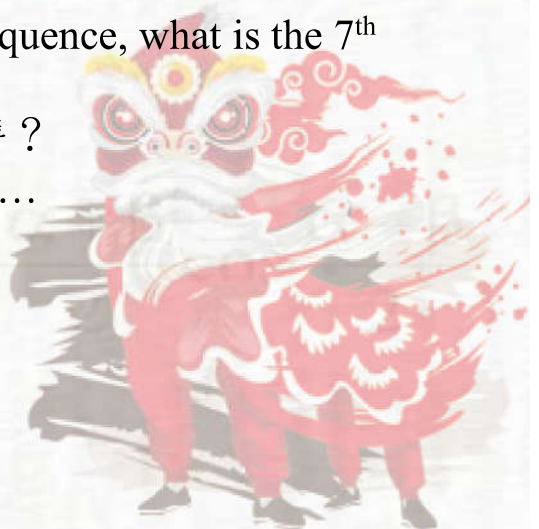
在橫線上填上加號或減號，使下列算式正確。（在答題紙上寫上完整算式）

$$2 \quad \underline{\quad} \quad 8 \quad \underline{\quad} \quad 4 \quad \underline{\quad} \quad 10 \quad \underline{\quad} \quad 3 = 13$$

14. The numbers below follow the arithmetic sequence, what is the 7th number?

根據以下的等差數列，問第 7 個數是甚麼？

58、51、44、37、30、...



15. Determine the result of $1+3+5+7+9+11+13+15+17+19$ is odd or even.

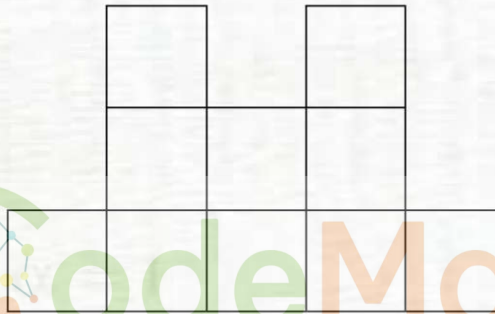
判斷 $1+3+5+7+9+11+13+15+17+19$ 的結果是奇數（單數）還是偶數（雙數）。

Geometry

幾何

16. How many square(s) is / are there in the figure below?

請問下圖有多少個正方形？

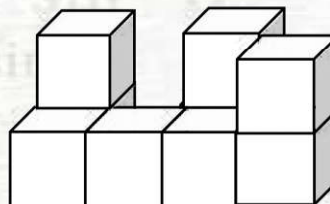


Question 16

第 16 題

17. At least how many cube(s) is / are there in the figure below?

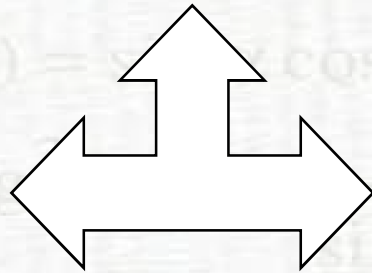
下圖最少由多少個立方體組成？



Question 17

第 17 題

18. How many interior angle(s) is / are there in the polygon below?
 下圖的多邊形有多少隻內角？



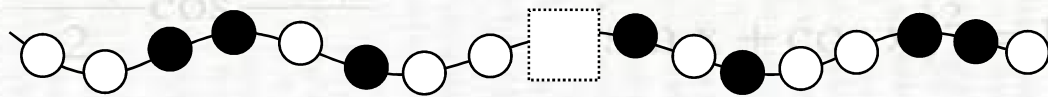
Question 18
 第 18 題

19. By observing the pattern, from left to right, what is the missing figure?
 觀察規律，從左至右數，消失的圖形是什麼？



Question 19
 第 19 題

20. According to the pattern shown below, what is the figure in the space provided?
 按以下規律，橫線上的圖案應該是甚麼？



Question 20
 第 20 題



Combinatorics

組合數學

21. Which number below is the greatest?

下列哪一個數的值最大？

20190513、20195479、20189845、20196490

22. Choose 2 digits, without repetition, from 5, 1, 0 and 3 to form 2-digit odd numbers. How many different number(s) is / are there?

從 5、1、0、3 中選 2 個不可重複的數位組成兩位奇數（單數）。請問當中有多少個不同的數？

23. According to the following numbers, what is the difference between the number of even number(s) and odd number(s)?

求下列這些數中，有偶數（雙數）和奇數（單數）相差多少個？

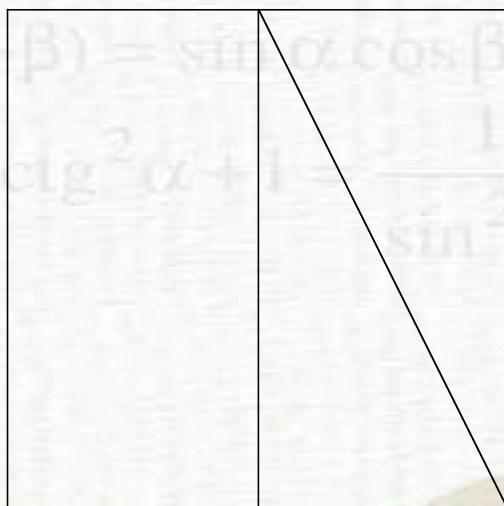
1, 7, 13, 14, 21, 27, 30, 45

24. What is the largest 3-digit even number by choosing 3 numbers from 0, 5, 1 and 3? (Each number can only be used once)

從 0、5、1 和 3 選取 3 個數字組成最大的三位偶數（雙數）是多少？（每個數字只能用一次）

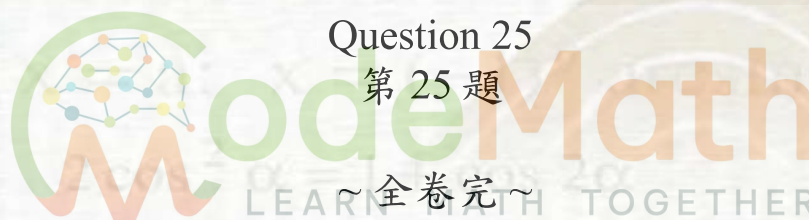
25. Refer to the figure below, how many points can be the starting point to drawing the picture with one stroke?

參考附圖，有多少點可以作為開始以一筆畫出圖形？



Question 25

第 25 題



~ 全卷完 ~ LEARN MATH TOGETHER

~ End of Paper ~

