MathConception
2018

G3

Question Booklet

問題簿

Name:
姓名：

Reg. No.:
考生編號：

Time: 1 hour
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. **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. **If the information printed on your answer sheet is not correct, please inform the invigilator immediately.**
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：1小時
不允許使用計算機。

考生須知：

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. 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. 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。

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) 33 + 77 = ? [1%]

2) 753 − 421 = ? [1%]

3) 100 − 76 = ? [1%]

4) 5 × 9 = ? [1%]

5) 48 ÷ 8 = ? [1%]

6) 88 × 8 = ? [1%]

7) 91 ÷ 7 = ? [1%]

8) 33 + 4 × 75 = ? [1%]

9) 55 + 39 + 39 + 39 + 39 + 39 = ? [1%]

10) 3 × 5 + 5 × 7 + 7 × 9 + 9 × 11 = ? [1%]

11) 24 + 31 − 59 + 36 = ? [1%]

12) 74 × (53 − 47) = ? [1%]

13) 8 × (45 + 54) = ? [1%]

14) 87 ÷ 3 = ? [1%]

15) 1024 ÷ 8 = ? [1%]

16) A lunch box costs $47. If John buys 7 lunch boxes, how much does he have to pay? [2.0%]

一個飯盒售價 47 元。小明買了 7 個飯盒，他需要付多少元？

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17) John has 23 stamps. Mary has 9 stamps. How many stamps does John have to give Mary so that they will have the same number of stamps? [2.1%]

小明有 23 個郵票，小美有 9 個郵票。問小明要給小美多少個郵票，才可以使他們擁有的郵票數目相同？

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18) A bag of potato chips costs $19. A box of chocolates costs $36. How much do 6 bags of potato chips and 8 boxes of chocolates cost? [2.2%]

一包薯片售 19 元，一盒朱古力售 36 元，問 6 包薯片和 8 盒朱古力共售多少元？

19) Find the missing number. [2.3%]

找出橫線上的數字。

$$4 \text{ kg } 70 \text{ g} = \underline{\quad ? \quad} \text{ g}$$

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20) Mary has 51 candies. She wants to distribute all the candies to 7 children evenly. At least how many more candies does she need to buy? [2.4%]

小美想把一些糖果平均分給 7 位小朋友。已知小美已經有 51 粒糖果，如果她想把所有糖果都送出，問她最少要多買糖果多少粒？

21) In a library, 2479 books were borrowed yesterday. [2.5%] 3168 more books were borrowed today than yesterday. How many books were borrowed in these two days?
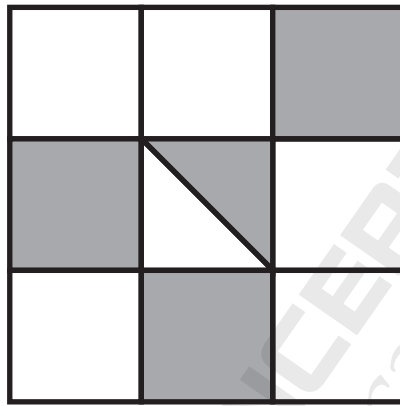
圖書館昨天借出了圖書 2479 本，今天比昨天多借出了 3168 本。問圖書館在這兩天共借出了圖書多少本？

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22) Ada has 7 dollars less than Billy. Billy has 16 [2.6%] dollars more than Charles. If Charles has 19 dollars, how much do they have altogether?

甲比乙少 7 元，乙比丙多 16 元。如果丙有 19 元，三人共有多少元？

23) Write the fraction that represents the shaded [2.7%] part.

圖中著色部分佔全圖的幾分之幾？

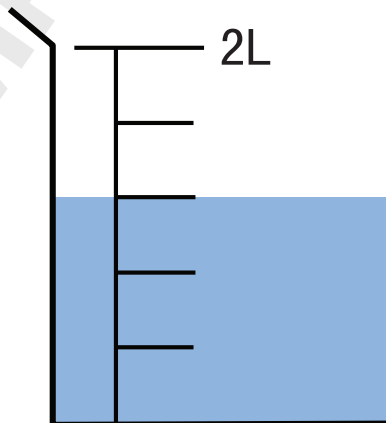24) What is $\dfrac{5}{6}$ of 84? [2.8%]

84 的 $\dfrac{5}{6}$ 是多少？

25) A triangle has two equal angles. It is a/an   [2.9%]
_____ triangle.

一個三角形有兩個相同的角。這是一個
_____ 三角形。

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26) How much water in millilitres is in the container? [3.0%]

以下圖中有水多少毫升？

2L

27) Arrange the following fractions from the largest to the smallest. [3.1%]

把下列的分數由大至小排列。

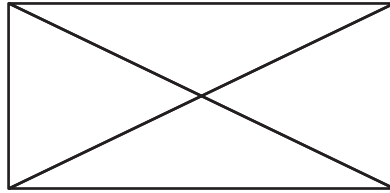$$\frac{7}{9} \, , \, \frac{10}{11} \, , \, \frac{7}{11} \, , \, \frac{8}{9}$$

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28) John slept for 8 hours 23 minutes last night. He woke up at 6:11 am today. When did he go to bed? (Answer in 24-hour time) [3.2%]

小明昨晚睡了 8 小時 23 分鐘，他在第二天早上 6 時 11 分起床。問他在甚麼時候開始睡覺？
（ 以 24 小時報時制作答 ）

29) How many pair(s) of perpendicular lines are [3.3%] there in the figure below?

下圖有多少對垂直線？

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30) If the sum of all digits of a 5-digit even [3.4%] number is 23, what is the smallest possible value of the number?

一個五位雙數各個數字之和是 23 ，這個數最小是多少？

31) Find the value of 137 × 2018 + 863 × 2018.   [4.0%]

求 137 × 2018 + 863 × 2018 的值。

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32) Find the value of A + B + C in the pattern.   [4.1%]

根據數字規律，求 A + B + C 的值。

13, 26, 18, 15, 23, 25, 17, 20, 32, A, B, C

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33) 2 pencils and 3 rulers cost $35 in total. 3 pencils   [4.2%]
and 2 rulers cost $30 in total. How much do
1 pencil and 1 ruler cost in total?

兩支鉛筆和三把間尺共值 35 元，三支鉛筆和兩
把間尺共值 30 元。問一支鉛筆和一把間尺共值
多少元？

34) Cutting a metal stick into 4 pieces needs 24 minutes. How many minutes does it take to cut the metal stick into 10 pieces? [4.3%]

將一條鐵棒鋸開 4 份需要 24 分鐘。將一條鐵棒鋸開 10 份需要多少分鐘？

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35) There are 12 children in a room. If each child shakes hands with each of the other children once, how many handshakes will occur? [4.4%]

一間房內有 12 位小朋友，每位小朋友都與其他小朋友握了一次手。問握手的場面出現了多少次？

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36) It is given that 18th February 2018 is Sunday. Which day of the week is 1st April 2019? [4.5%]

已知 2018 年 2 月 18 日是星期日，問 2019 年 4 月 1 日是星期幾？

37) A new integer is formed by adding two zeros [4.6%]
to the right of the original integer. If the new
integer is larger than the original integer by
4356, what is the original integer?

在一個整數的末端添上兩個 0，就成了一個新的
數，這個數比原來的數多 4356，問原來的整數
是多少？

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38) If each letter represents a different digit, then [4.7%]
what 4-digit number does "ABCD" represent?

在下式中，各英文字母表示一個不同的數字。
問「ABCD」代表哪一個四位數？

$$
\begin{array}{ccccc}
 & & & & A \\
 & & & A & B \\
 & & A & B & C \\
+ & A & B & C & D \\
\hline
 & 1 & 9 & 9 & 2 \\
\end{array}
$$

39) There is a group of students. Each of them has to join at least one of the football class, piano class, French class and art class. The maximum number of students for each class is 9. If every two students would meet each other in at least one class, at most how many students are there in the group? [4.8%]

足球班、鋼琴班、法文班和美術班四種課程各有 9 個名額。一批學生每人都參加了至少一個課程。如果任意每兩位學生都至少報讀了一個相同的課程，問這批學生最多有多少人？

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40) Find the value of the 2018th number in the pattern. [4.9%]

根據以下規律，找出第 2018 個數的值。

$$1, \ 5, \ 10, \ 16, \ 23, \ 31, \ \ldots\ldots$$

End of paper
全卷完

#	ANSWER	MUO	#	ANSWER	MUO	#	ANSWER	MUO	#	ANSWER	MUO
1 ↓	110	○	11 ↓	32	○	21 ↓	8126	○	31 ↓	2018000	○
2 ↓	332	○	12 ↓	444	○	22 ↓	82	○	32 ↓	75	○
3 ↓	24	○	13 ↓	792	○	23 ↓	$\frac{7}{18}$	○	33 ↓	13	○
4 ↓	45	○	14 ↓	29	○	24 ↓	70	○	34 ↓	72	○
5 ↓	6	○	15 ↓	128	○	25 ↓	等腰 Isosceles	○	35 ↓	66	○
6 ↓	704	○	16 ↓	329	○	26 ↓	1200	○	36 ↓	星期一 Monday	○
7 ↓	13	○	17 ↓	7	○	27 ↓	$\frac{10}{11}, \frac{8}{9}, \frac{7}{9}, \frac{7}{11}$	○	37 ↓	44	○
8 ↓	333	○	18 ↓	402	○	28 ↓	21:48	○	38 ↓	1795	○
9 ↓	250	○	19 ↓	4070	○	29 ↓	4	○	39 ↓	15	○
10	212	○	20	5	○	30	10598	○	40	2041205	○