MathConcepttion
2021

P2

Question Booklet

問題簿

Name:
姓名：

Reg. No.:
登記編號：

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) $3 \times 8 = ?$ [1%]

2) $7 \times 6 = ?$ [1%]

3) $36 \div 4 = ?$ [1%]

4) $56 \div 8 = ?$ [1%]

5) $35 - 18 = ?$ [1%]

6) $164 + 78 = ?$ [1%]

7) $273 - 145 = ?$ [1%]

8) $446 + 267 = ?$ [1%]

9) $521 - 283 = ?$ [1%]

10) $3 \times 2 \times 7 = ?$ [1%]

11) $40 \div 5 \div 2 = ?$ [1%]

12) $6 \times 9 - 8 = ?$ [1%]

13) $32 \div 8 + 2 = ?$ [1%]

14) $7 \times 8 + 67 = ?$ [1%]

15) $72 \div 9 - 6 = ?$ [1%]

16) Find the product of the units digit of 2476 and the hundreds digit of 5918. [2%]

2476 的個位數字乘以 5918 的百位數字是多少?

_____

17) 2 hours 35 minutes = __?__ minutes [2.1%]

2 小時 35 分鐘 = __?__ 分鐘

18) I can use ___?___ sticks and 10 plasticine balls to make a pentagonal prism. [2.2%]

我可以用 ___?___ 支竹籤和 10 粒泥膠來製作一個五角柱體。

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19) Judy bought a pencil case at 36 dollars and 40 cents, which was 18 dollars and 80 cents cheaper than the original price. What was the original price of the pencil case? [2.3%]

小迪用 36 元 4 角買了一個筆盒，比原價便宜了 18 元 8 角，問筆盒的原價是多少元多少角？

20) The pictogram below shows the number of different kinds [2.4%]
of fruits in a shop.

下圖顯示了水果店內不同水果的數量。

Each picture represents 1 fruit
每圖代表1個
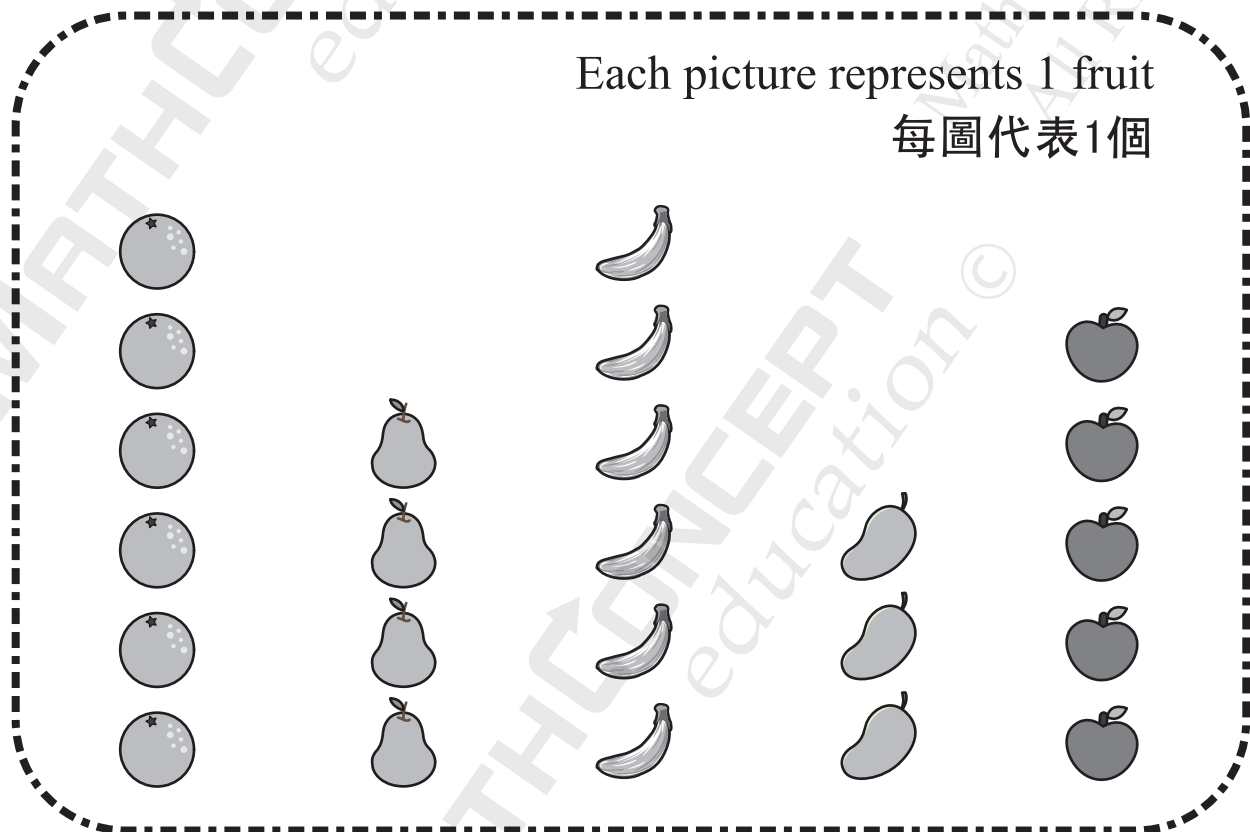
The total number of oranges and mangoes is ___?___ more
than the number of apples.

橙和芒果的總數比蘋果多___?___個。

21)　How many prisms are there in the figure below?　　　　　[2.5%]

下圖共有多少個角柱？

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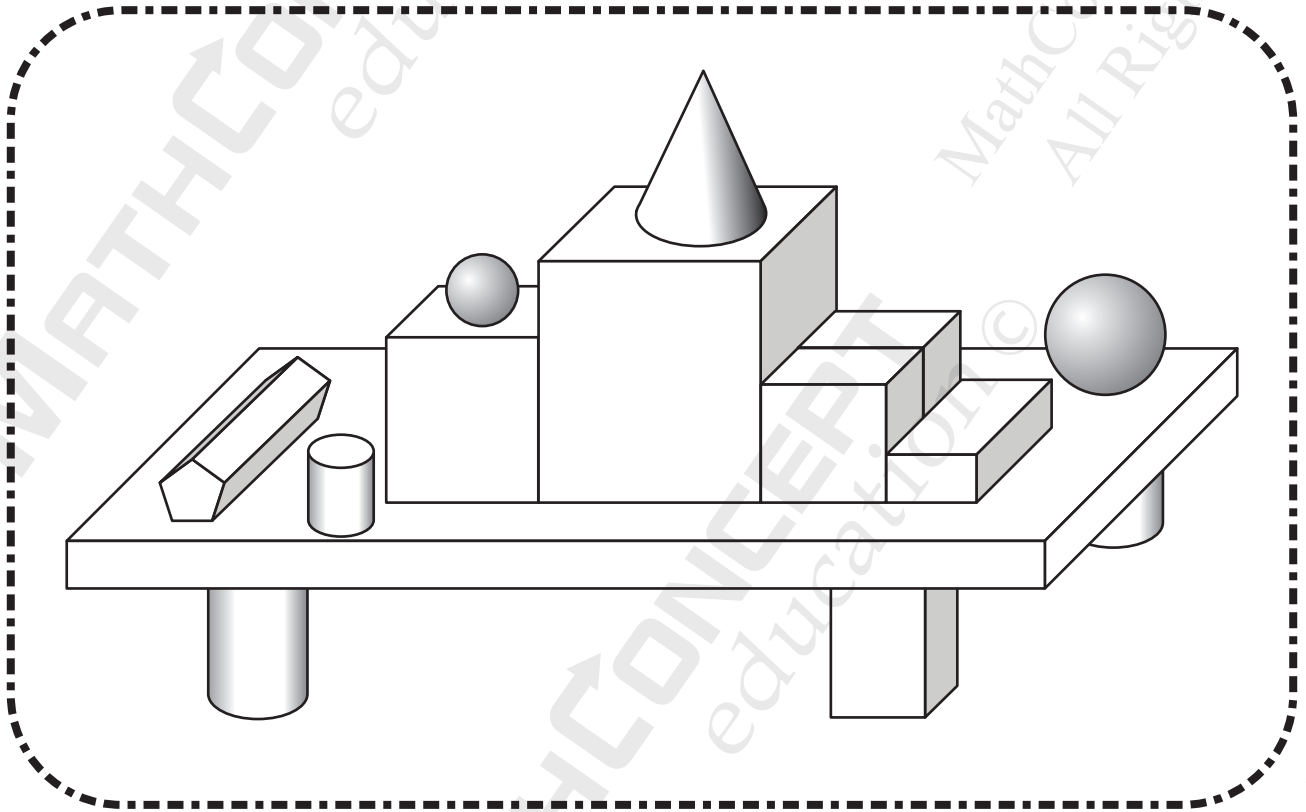
22)　The weight of a melon is 3 kilograms. A watermelon is 95 grams heavier than the melon. What is the weight of the watermelon in grams?　　　　　[2.6%]

一個密瓜重 3 公斤，西瓜比密瓜重 95 克，問這個西瓜重多少克？

23) Form two 3-digit numbers by using the digits below. Each digit can be used at most once. What is the largest difference between the two numbers? [2.7%]

利用以下數字組成 2 個三位數，數字不可重複，它們的差最大是多少？

$$4 , 8 , 7 , 0 , 3 , 5$$

24) If all the faces of a pyramid have the same shape, it must be a __?__ pyramid. [2.8%]

如果一個錐體的所有面的形狀都相同，它必定是一個 __?__ 錐體。

25) Peter and James are standing face to face. If the north is on the left of James, then Peter is facing the __?__ . [2.9%]

小明和小強面對面站著。如果小強的左面是北方，那麼小明正面向 __?__ 方。

26) How many right angles are there in the figure below? [3%]

下圖共有多少個直角？
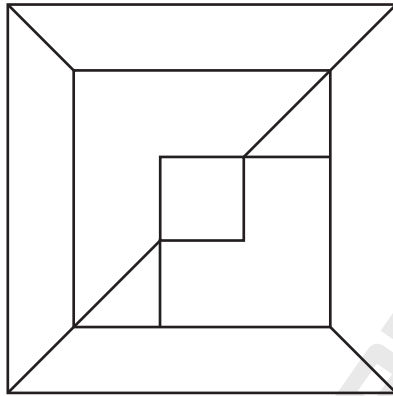
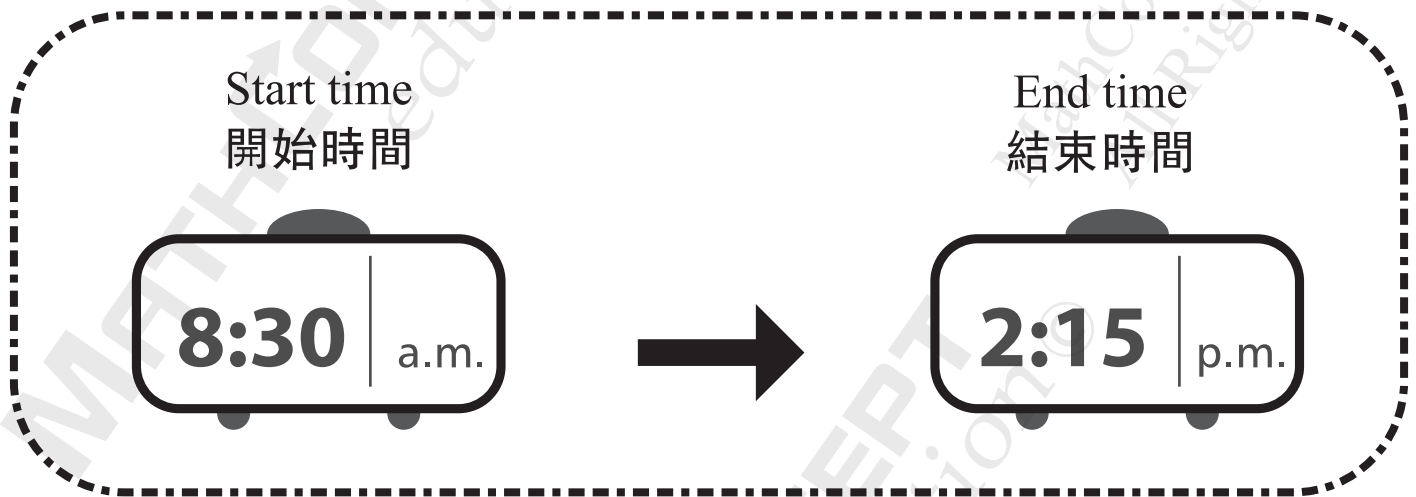
27) In the figure, if the pig is 1 metre long, how long is the camel in cm approximately? [3.1%]

下圖中，如果小豬長 1 米，那麼駱駝大約長多少厘米？
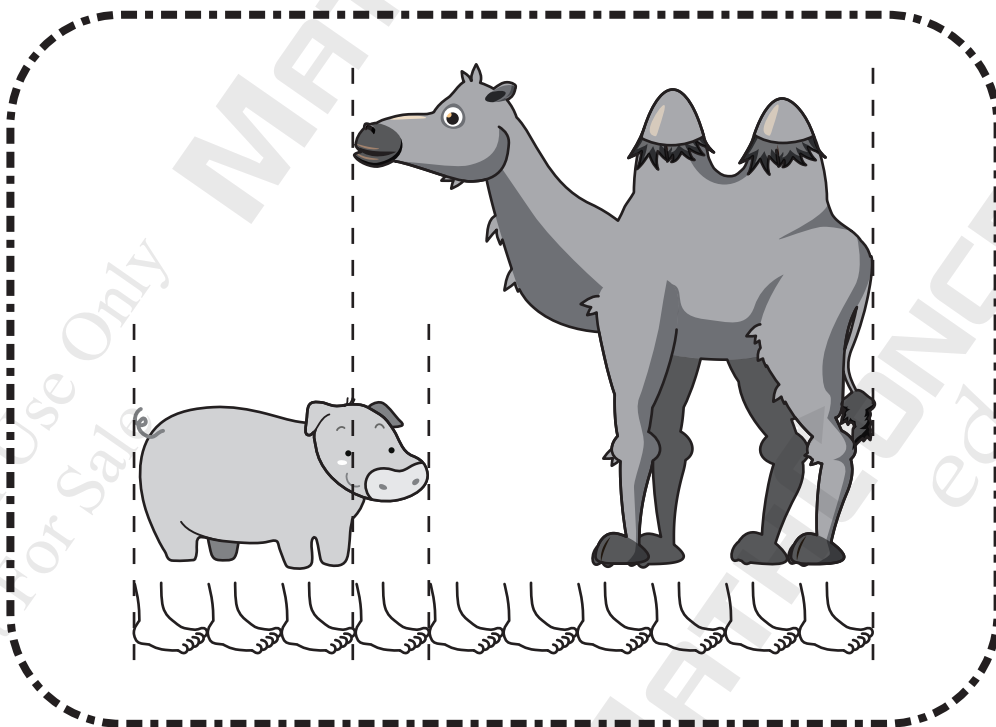
28) How many hours and how many minutes have passed? [3.2%]

過了幾小時幾分鐘？

Start time 開始時間	End time 結束時間
8:30 a.m.	→	**2:15** p.m.

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29) The lengths of two ribbons are 3 m 24 cm and 4 m 6 cm respectively. If they are glued together and the overlapping part is 152 cm long, how long is the glued ribbon in cm? [3.3%]

把兩條分別長 3 米 24 厘米和 4 米 6 厘米的絲帶貼起，重疊部分長 152 厘米，即貼起後的絲帶長多少厘米？

30) Peter planned to use 60 days to finish reading a story book. He started reading it on 24th March and finished it on 5th June. How many more days did he actually use than what he expected? [3.4%]

小明計劃用 60 天看完一本故事書。他由 3 月 24 日開始閱讀直至 6 月 5 日才完成。問他實際的完成時間比原定的多了多少天？

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31) Find the missing number in the pattern. [4%]

根據規律，找出橫線上的數字。

$$4 \ , \ 7 \ , \ 11, \ \underline{\ ? \ } \ , \ 29 \ , \ 47 \ , \ ...$$

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32) Cindy bought 3 pens and 2 notebooks with \$25. If each pen costs \$4, how much does each notebook cost? [4.1%]

小迪用 25 元買了 3 支鉛筆和 2 本筆記簿。已知每支鉛筆售 4 元，問每本筆記簿售多少元？

33) There are 3 pairs of yellow socks, 4 pairs of blue socks, 5 pairs of white socks and 6 pairs of black socks in a drawer. Two socks are randomly drawn from the drawer each time without replacement. At least how many times are needed to be drawn so that there must be two socks of the same colour?

[4.2%]

抽屜內有 3 雙黃襪、4 雙藍襪、5 雙白襪和 6 雙黑襪。每次從抽屜隨意取出 2 隻襪子，取出後不放回，最少要取多少次才可確保有 2 隻相同顏色的襪子？

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34) David will eat at least 1 but at most 3 candies each day. He will not eat the same number of candies in any two consecutive days. If David eats 1 candy on the first day, at most how many candies will he eat in 10 days?

[4.3%]

小明每天最少會吃 1 粒、最多 3 粒糖果，而且沒有連續兩天會吃相同數量。如果小明在 10 天內的第一天吃了 1 粒糖果，他在 10 天內最多共吃了多少粒糖果？

35) There are 60 people sitting around a circular garden. [4.4%]
When Bobby counts towards his left starting from himself,
Jenny is in the 20th place. When Bobby counts towards
his right starting from himself, what place is Jenny in?

有 60 人圍著一個圓型草地而坐。小明由自己開始數，
向左數第 20 個是小儀。那麼如果小明由自己開始數，
向右數第幾個會是小儀？

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36) 2 apples and 3 oranges cost 29 dollars. 5 apples and [4.5%]
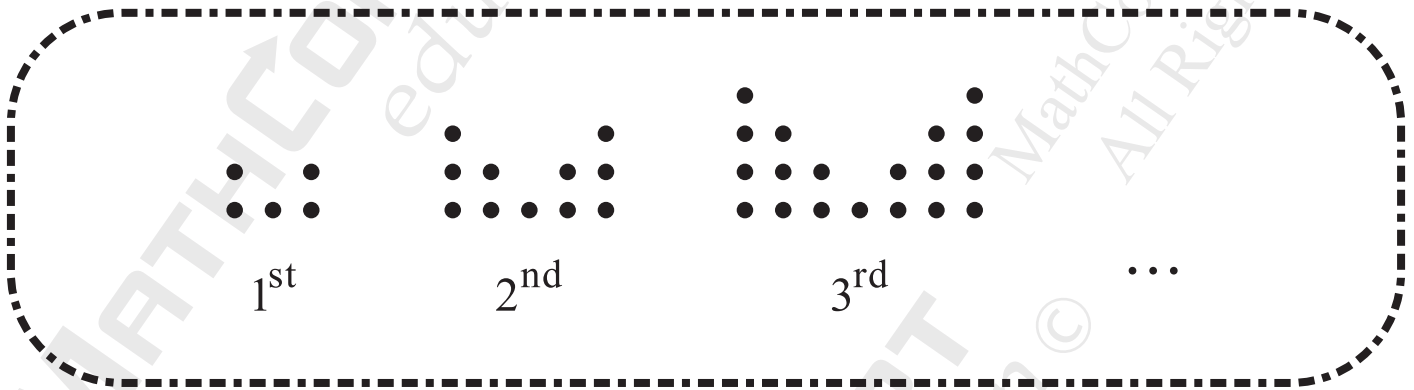4 oranges cost 48 dollars. How much do 2 apples and 1
orange cost?

2 個蘋果和 3 個橙共售 29 元。5 個蘋果和 4 個橙共
售 48 元。問 2 個蘋果和 1 個橙共售多少元？

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37) ABC is a 3-digit odd number. Given that the sum of A, B, [4.6%]
and C is 10. How many possible numbers are there for the
3-digit number ABC?

ABC 是一個三位單數。如果A、B、C之和是 10，問
這個三位數 ABC 有多少個可能值？

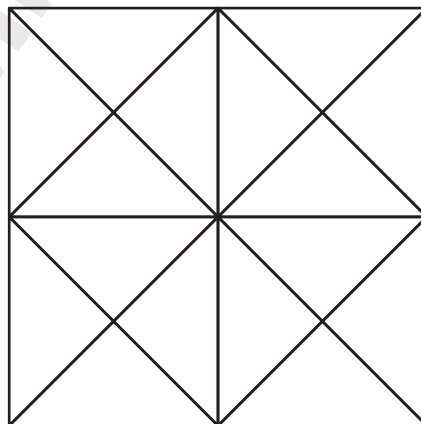38) How many dots are there in the 12th figure below? [4.7%]

下面第 12 組圖案的圓點有多少粒？

1st　　2nd　　3rd　　…

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39) How many triangles are there in the figure below? [4.8%]

下圖共有多少個三角形？

40) Find the value of $121 + 221 + 321 + \ldots + 2021$. [4.9%]

求 $121 + 221 + 321 + \ldots + 2021$ 的值。

End of paper
全卷完

REG NO
NAME
GROUP
SEAT

ANSWER SHEET

	ANSWER			ANSWER			ANSWER			ANSWER	
1	24	○	11	4	○	21	8	○	31	18	○
2	42	○	12	46	○	22	3095	○	32	($)6.50	○
3	9	○	13	6	○	23	571	○	33	3	○
4	7	○	14	123	○	24	Triangular 三角	○	34	24	○
5	17	○	15	2	○	25	West 西	○	35	42(th)	○
6	242	○	16	54	○	26	18	○	36	($)15	○
7	128	○	17	155	○	27	175	○	37	25	○
8	713	○	18	15	○	28	5 hr and 45 min 5 小時 45 分鐘	○	38	181	○
9	238	○	19	($)55.20	○	29	578	○	39	44	○
10	42	○	20	4	○	30	14	○	40	21420	○

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