

MathConceptition 2023

P2

00X

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。

MathConceptition 2023

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

2)
$$8 \times 7 = ?$$
 [1%]

3)
$$28 \div 4 = ?$$
 [1%]

4)
$$54 \div 6 = ?$$
 [1%]

6)
$$434 + 385 = ?$$
 [1%]

7)
$$357 + 169 = ?$$
 [1%]

8)
$$76-48=?$$
 [1%]

9)
$$662 - 45 = ?$$
 [1%]

10)
$$749 - 291 = ?$$
 [1%]

12)
$$416 - 74 - 124 = ?$$
 [1%]

13)
$$450 - 373 + 195 = ?$$
 [1%]

14)
$$4 \times 7 + 462 = ?$$
 [1%]

15)
$$9 \times 8 - 35 = ?$$
 [1%]

16) 4 hours 5 minutes = _____ minutes 4 小時 5 分鐘 = _____ 分鐘

[2%]

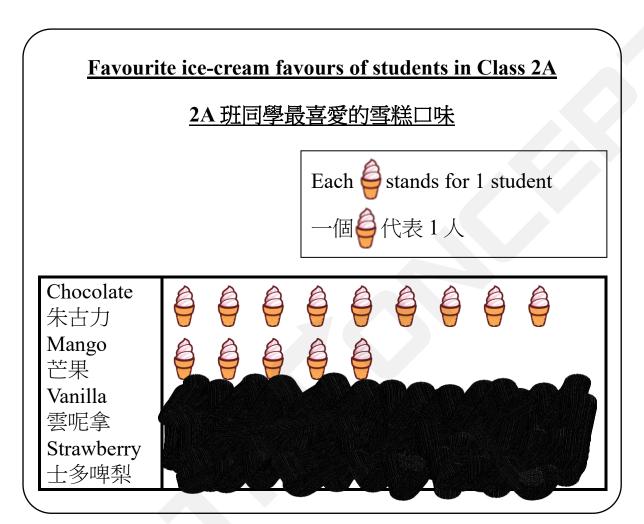
17) There are 538 balloons in a shop. 279 balloons are blue and others are red. If 94 red balloons and 106 blue balloons are sold, how many red balloons are left?

[2.1%]

店內有氣球 538 個氣球,其中 279 個是藍色,餘下的是紅色。 如果賣出 94 個紅色氣球和 106 個藍色氣球,店內餘下紅色氣 球多少個? **18**) The pictogram below shows the favourite ice-cream favours of 28 students in Class 2A.

[2.2%]

以下象形圖表示 2A 班 28 名同學最喜愛的雪糕口味。



If the number of students who like vanilla ice-cream is 2 more than that of students who like strawberry ice-cream, how many students like strawberry ice-cream?

如果喜愛雲呢拿雪糕的人數比喜愛士多啤梨雪糕的人數多2, 喜愛士多啤梨雪糕的有多少人?

19) There are 46 eggs. A farmer uses boxes to pack the eggs. If every half dozen eggs are packed into a box, how many eggs are there in all full boxes?

[2.3%]

農夫有 46 隻蛋。他用一些盒來裝着蛋。若每半打蛋裝成一 盒,所有裝滿的盒內共有蛋多少隻?

20) If Sally studies from eleven forty-three in the morning to half past twelve in the afternoon, how many minutes does she spend on studying?

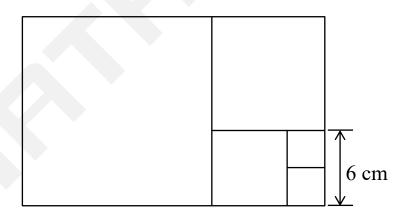
[2.4%]

如果<u>莎莉</u>由上午十一時四十三分開始溫習,直至下午十二時半,她溫習共用了多少分鐘?

21) Find the sum of the tens digit of 6789 and the value represented by [2.5%] the hundreds digit of 5432.

找出 5432 的百位數字表示的數值與 6789 的十位數字之和。

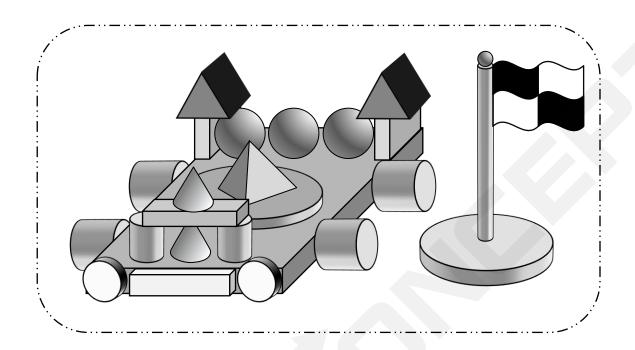
22) The figure below shows a rectangle formed by several squares. The [2.6%] longer side of the largest rectangle is ____ cm long.



23) How many cylinders are there in the figure below?

[2.7%]

下圖共有多少個圓柱?



24) There are 28 sticks and plenty of plasticine balls, in which 12 plasticine balls and some sticks are used to form a prism. By using all the remaining sticks and plasticine balls, a/an ____ pyramid can be formed.

[2.8%]

25) Making a bag needs a 2 m 5 cm of cloth. It needs 152 cm more cloth to make a backpack than to make a bag. If a 5 m cloth is used to make a backpack, how many centimetres of cloth is left?

[2.9%]

製作一個布袋需要一匹 2 米 5 厘米的布,而製作一個背包比製作一個布袋需要多 152 厘米的布。如果用一匹 5 米的布來製作一個背包,還餘下布多少厘米?

Ronald has 88 dollars. He buys a book and 4 pens. If a book costs 42 dollars 80 cents, and 2 pens are 27 dollars 20 cents cheaper than a book, how much does Ronald spend in dollars?

[3%]

<u>俊傑</u>有88元。他買了4支筆和一本書。如果一本書的售價為42元8角,而2支筆比一本書便宜27元2角,<u>俊傑</u>用了多少元?

27) Among all 3-digit odd numbers which have the digit "0" but not the digit "1", what is the difference between the largest and the smallest numbers?

在所有包含數字「0」而不包含數字「1」的三位單數中,最大的數與最小的數之差是多少?

A boy is standing between a tree and a tower. The tree is in front of him. If the south is to his right, the tower is to the _____ of the tree.

男孩正站在樹和塔之間,而樹在他的前方。若男孩的右面是南方,塔在樹的_____。

A) east 東方 B) south 南方 C) west 西方 D) north 北方

29) Form 4-digit numbers by using the digits "0", "1" and "2" only, where each digit can be used more than once. How many odd numbers can be formed which are smaller than 2000?

[3.3%]

只利用數字「0」、「1」及「2」組成四位數,而各數字可以重複使用,可組成多少個比 2000 小的單數?

30) Find the missing number in the pattern.

[3.4%]

根據規律,找出橫線上的數字。

2023, 2022, 2025, 2019, 2029, <u>?</u>, 2035, ...

Marco has 3 sons. Their ages are 8, 11 and 14. If Marco is 45 years old now, after how many years will the sum of the ages of his sons be as same as his age?

[4%]

小高有3個兒子,分別是8歲、11歲和14歲。如果<u>小高</u>現時45歲,多少年後兒子年齡的總和將會與他的年齡相同?

32) Each letter represents a 1-digit number. Find A.

[4.1%]

如果每個英文字母代表一個一位數,求A。

Rosanne has 3 five-dollar coins, plenty of two-dollar coins and 5 fifty-cent coins. If Rosanne buys 5 apples and each apple costs 6 dollars, at least how many coins should she pay such that there is no change?

[4.2%]

小<u>露</u>有 3 枚五元硬幣、很多二元硬幣及 5 枚五角硬幣。如果<u>小</u> <u>露</u>買了 5 個蘋果,每個蘋果售 6 元,她最少要付硬幣多少枚, 才不需要找續?

34) 10th March, 2024 is a Sunday. Which day of the week is 24th January, 2024?

[4.3%]

2024年3月10日是星期日。2024年1月24日是星期幾?

35) The side length of a square flowerbed is 24 metres. Workers place a [4.4%] notice board every 3 metres along the sides of the flowerbed. If a notice board is placed at each corner of the flowerbed, how many notice broads are there?

一個正方形花圃的邊長是 24 米。工人在花圃外圍每 3 米放一個告示牌。如果花圃的每個角落都放有一個告示牌,共有告示牌多少個?

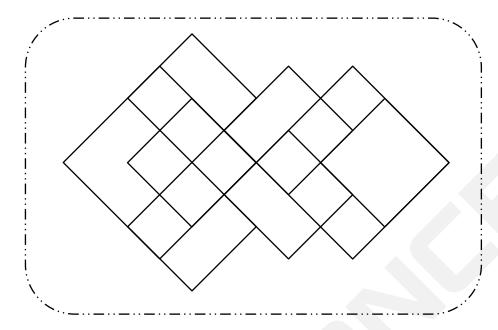
36) ABC is a 3-digit number, where A, B and C are 3 different numbers. [4.5%] The product of A, B and C is 135. If the hundreds digit and units digit are swapped, the new integer is 396 smaller than ABC. What is the number ABC?

ABC是一個三位數,而 $A \cdot B$ 和 C是不同數字。 $A \cdot B \cdot C$ 之積是 135。如果把百位數字和個位數字互換,則新的數值較 ABC 小 396。ABC 這個數是甚麼?

37) How many squares are there in the figure below?

[4.6%]

下圖共有多少個正方形?



38) Find the value of $2023 + 1823 + 1623 + \dots + 223 + 23$.

[4.7%]

求 2023 + 1823 + 1623 + … + 223 + 23 的值。

39) Ada, Betty, Christy and their friends are sitting around a table. Starting from Christy, Ada is sitting on the ninth seat on her left-hand side, while Betty is sitting on the twelfth seat on her right-hand side. There are 5 people sitting between Ada and Betty. At least how many people are there altogether?

[4.8%]

小芳、小麗、小昕與他們的朋友圍繞一張桌子坐着。從<u>小昕</u>開始數,<u>小芳</u>坐在她左手邊第九個位,而<u>小麗</u>坐在她右手邊第十二個位。<u>小芳和小麗</u>之間有 5 人坐着。這裏最少共有多少人?

40) Find the missing number.

[4.9%]

求缺少的數字。

	16	18	
1	63	56	21
15	65	?	9
	25	16	•

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REG NO		
NAME		
GRADE		
SEAT		

P2

ANSWER SHEET

							\bigcirc	DCHECK		\bigcirc A	BSENT	
		ANSWER			ANSWER			ANSWER			ANSWER	
0000	1	36	0	11	480	0	21	408	0	31	6	0
0000 0000	2	56	0	12	218	0	22	24	0	32	5	0
0000 0000	3	7	0	13	272	0	23	11	0	33	12	0
0000	4	9	0	14	490	0		pentagonal 五角	0	34 <u> </u>	Vednesday 三 / 星期三	0
0000	5	792	0	15	37	0	25	143	0	35	32	0
0000	6	819	0	16	245	0	26	74	0	36	935	0
0000	7	526	0	17	165	0	27	706	0	37	20	0
0000	8	28	0	18	6	0	28	C. west 西方	0	38	11253	0
0000 0000 0000 0000	9	617	0	19	42	0	29	9	0	39	15	0
0000	10	458	0	20	47	0	30	2014	0	40	58	0