亞 洲 國 際 數 學 奧 林 匹 克 聯 合 會
ASIA INTERNATIONAL MATHEMATICAL OLYMPIAD UNION

亞洲國際數學奧林匹克公開賽初賽
Asia International Mathematical Olympiad Open Trials

小三組 Grade 3

時限：**70** 分鐘

Time allowed: **70** minutes

樣本試題

Sample Questions

請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

甲部：每題 4 分

Section A – each question carries 4 marks

1) 求 123 + 456 + 789 – 159 – 426 – 783 的值。
   Find the value of 123 + 456 + 789 – 159 – 426 – 783.

2) 若某年的 2 月 1 日是星期一，該年的 1 月 1 日是星期幾？
   If the 1st of February of a year is a Monday. Which day of the week is the 1st of January of the same year?

3) 已知 $11 \times 11 = 121$ 、 $111 \times 111 = 12321$，求 11111×11111 的值。
   It is known that $11 \times 11 = 121$ and $111 \times 111 = 12321$. Find the value of 11111×11111.

4) 若某數乘 9，再將得出的積加上 1009 後，得 11008，求某數的值。
   If a number is multiplied by 9 and add the product by 1009, the result is 11008. Find the number.

5)

6)

7)

8)

~ 甲部完 ~
~ End of section A ~

請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

乙部：每題 5 分

Section B – each question carries 5 marks

9) 求 $2016 \times 337 - 1016 \times 337$ 的值

Find the value of $2016 \times 337 - 1016 \times 337$.

10) 小馬每天吃飯的時間是小奧的 8 倍，若小馬每天比小奧多吃 14 小時，問小馬一天用多少小時吃飯？

The dining time of Mason each day is 8 times than that of Leo. If Mason's dining time is 14 hours longer than that of Leo. How many hours does Mason used for eating every day?

11) 在算式 $A \times B = C$ 中，如果 A 增加 6，B 不變，C 增加 24；B 減少 2，A 不變，C 減少 50。
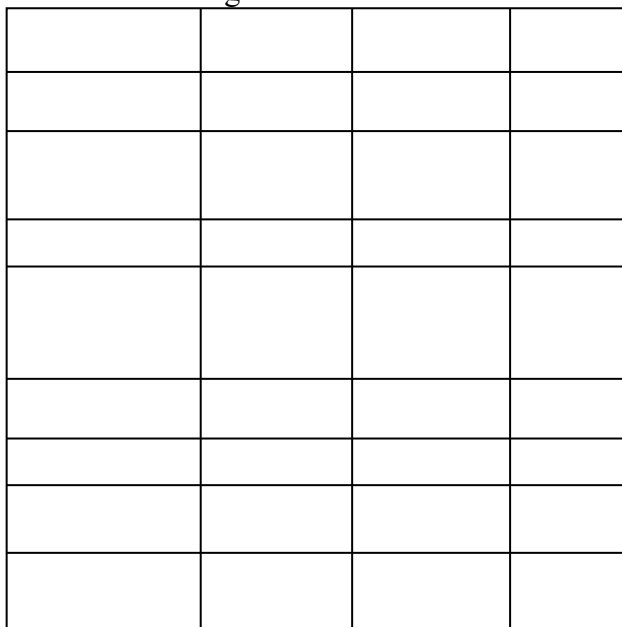
問 $A - B$ 是多少？

Given a multiplication $A \times B = C$. If we increase A by 6 while B is unchanged, C is increased by 24.

If we decrease B by 2 while A is unchanged, C is decreased by 50. Find the value of $A - B$.

12) 附圖中有多少個長方形？

How many are rectangles are there in the figure below?

第 12 題

Question 12

13)

14)

15)

16)

~ 乙部完 ~

~ End of section B ~

請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

丙部：每題 7 分

Section C – each question carries 7 marks

17) 大偉原本比小樸多 26 元。他們之後去購物。
他們買了以下的物品：
i)   大偉買了 3 支汽水、小樸買了 5 枝。
ii) 大偉買了 4 枝雪條、小樸買了 6 枝。
最後大偉比小樸多 42 元，若一枝雪條比一支汽水貴 2 元，問一支汽水值多少？
At the beginning, David has $26 more than that of Poppy, then they went shopping :
i)   David bought 3 bottles of coke, Poppy bought 5 bottles
ii) David bought 4 ice-cream bars , Poppy bought 6
In the end David has $42 more than that of Poppy. If an ice-cream bar is $2 more expensive than that of coke, what is the price of a bottle of coke?

18) 小明錢包中有一些錢，每一天早上他都會：
將自己的錢分成等值的三份、將其中一份放進撲滿中，再將兩元放進撲滿中。若他在第一天的下午用了 7 元、第二天上午用了 4 元、第三天在中午用了 8 元。三天後的晚上他剩下了 6 元。
問他三天後撲滿多了多少錢？
Charles have some money. In each morning, Charles will do the following：
Separate the money into three piles of equal value, put one pile into the piggy bank, then put $2 into the piggy bank. It is also known that in the afternoon he spent $7, $4 and $8 in the first, second and the third day. At the night in the third day, he has $6 left. How much is saved in the piggy bank by then?

19)

20)

~ 全卷完 ~
~ End of Paper ~