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

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

小二組 Grade 2

時限：60 分鐘

Time allowed: 60 minutes

樣本試題
Sample Questions

甲部：每題 4 分

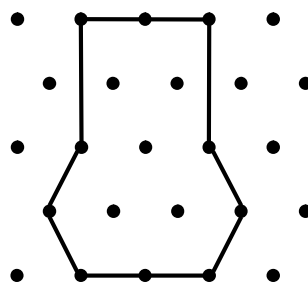Section A – each question carries 4 marks

1) 下圖有多少條線段？

   How many line segments are there in the figure below?
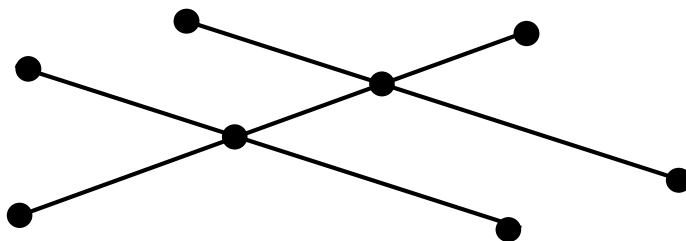
第 1 題

Question 1

2) 參考附圖，圖中每三個相鄰點組成的三角形面積都是 1 平方厘米，求圖形的面積。

   In the figure, the area of each equilateral triangle formed by three neighboring points is 1cm^2. Find the area of the figure.

第 2 題

Question 2

3) 求 $71 + 57 + 62 + 38 + 43 + 29$ 的值。

   Find the value of $71 + 57 + 62 + 38 + 43 + 29$.

4) 求 $15 - (79 - 85) + 74$ 的值。

   Find the value of $15 - (79 - 85) + 74$.

5)

6)

7)

請以最簡形式填寫答案。若計算結果是分數，請化至最簡，並確保為真分數或帶分數，或將計算結果寫成小數。

答案可以根式表示，唯該根式必須是最簡形式。除特別註明外，毋需填寫單位。錯誤單位將不給予任何分數。

Write down the answer in the simplest form. If the calculation result is a fraction, please write down the answer as a proper or mixed fraction, decimal figure is also accepted. You may use square root to represent the answer which is in the simplest form.

Unless otherwise stated, no need to write down any unit. Marks will NOT be given for incorrect unit.

8)

~ 甲部完 ~
~ End of section A ~

乙部：每題 5 分
Section B – each question carries 5 marks

9) 求 $18+27-36-45-54-63+72+81$ 的值。
Find the value of $18+27-36-45-54-63+72+81$.

10) 求 $(32+33+34+\ldots+46)-(26+27+28+\ldots+40)$ 的值。
Find the value of $(32+33+34+\ldots+46)-(26+27+28+\ldots+40)$.

11) 小偉和小威共有 74 條香蕉；若小偉比小威多 26 條香蕉，問小偉有多少條香蕉？
William and David have a total of 74 bananas. David has 26 more bananas than William. How many bananas does David have?

12) 如果有 15 個泥膠小球和 28 枝竹籤，問利用這些材料做成的錐體底部是一個甚麼邊形？(不可以把泥膠小球分開作多個小球用，也不可以把竹籤弄斷。)
A pyramid is formed by using 15 clay balls and 28 bamboo sticks. If the base of the pyramid is a polygon. How many sides does the polygon have?
(Clay balls cannot be broken down as several balls, and the sticks cannot be bent)
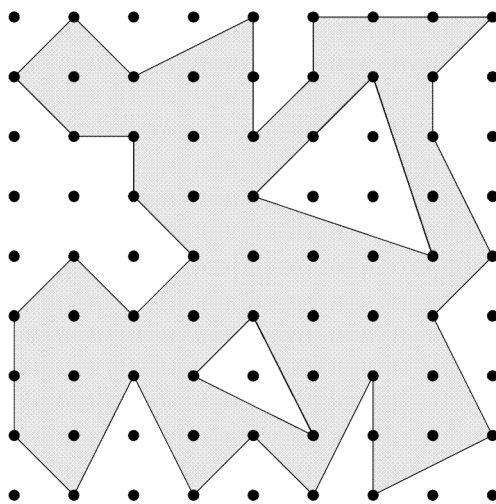
13)

14)

15)

16)

~ 乙部完 ~
~ End of section B ~

丙部：每題 7 分

Section C – each question carries 7 marks

17) 參考附圖，每個小正方形的面積是 1 平方單位，試求附圖中陰影部分的面積。

In the figure, the area of each smallest square is 1 unit square. Find the area of the shaded region.

第 17 題

Question 17

18) 小詩有 5 元、2 元和 1 元的硬幣各 4 枚，同這些硬幣可組成多少種不同的面值？
(註：0 不計算在內)

Christy has some \$5, \$2 and \$1 coin. She has 4 coins of each type. How many different face values can she form using those coins?

19)

20)

~ 全卷完 ~

~ End of Paper ~