

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) 圖 1.1 由兩個正方形組成，問陰影部份的面積是多少平方厘米？
Figure 1.1 is formed by 2 squares. What is the area of the shaded area in cm^2 ?

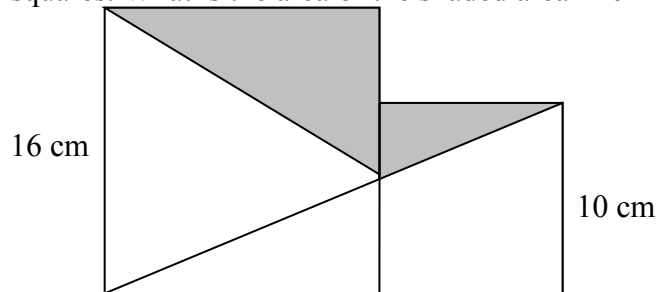


圖 1.1

Figure 1.1

- 2) 求 234、276 和 330 的最大公因數。
Find the highest common factor (H.C.F.) of 234, 276 and 330.
- 3) 求以下算式的值。
Find the value of the following expression.
 $111111 \times 666666 \div 12345654321$
- 4) 求 2017 的所有正因數之和。
Find the sum of all positive factors of 2017.
- 5) 某三位數除以 2、3 或 7 中任何一個數都餘 1，問該三位數最小是多少？
The remainder of a three-digit number divided by 2, 3 or 7 is 1. What is the smallest value of the three-digit number?
- 6) 使用數字 3、4、6、8 組成三位數，問可以組成多少個沒有重覆數字的三位數？
Form a three-digit number using the numbers 3, 4, 6 and 8. How many three-digit numbers without repeating digits can be formed?
- 7) $\frac{17}{34290}$ 和 $\frac{13}{26248}$ ，問哪一個較大？
Which number is larger, $\frac{17}{34290}$ or $\frac{13}{26248}$?
- 8) 問 9831 是質數還是合成數？（請在答題紙上寫上：「質數」／「合成數」）
Is 9831 a prime number or a composite number? (Write down “Prime”/“Composite” on the answer sheet)

~ 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 $12^3 \times 45^6 \times 78^9$ 除以 10 的餘數。

Find the remainder when $12^3 \times 45^6 \times 78^9$ is divided by 10.

10) 求以下算式的值。

Find the value of the following expression.

$$61\frac{1}{2} \times \frac{2}{3} + 41\frac{1}{3} \times \frac{3}{4} - 81\frac{1}{7} \times \frac{7}{8}$$

11) 求以下算式的值。

Find the value of the following expression.

$$\frac{1}{3} \times \frac{1}{\frac{1}{5}} \times \frac{1}{\frac{1}{7}} \times \frac{1}{\frac{1}{9}}$$

12) 在首四天，小明 平均每天使用 58 元，如果要使五天的平均使費少於 47 元，而且第五天的使費是整數，問他第 5 天最多可花多少元？

On the first 4 days, Mickey spends 58 dollars each day in average. To make the average spending in five days less than 47 dollars per day, and the spending on the fifth day is an integer, how much at most can he spend on the fifth day?

13) 1 至 345 中（包括 1 和 345），有多少個數字可以被 7 或 19 整除？

Between 1 and 345 (1 and 345 inclusive), how many numbers are divisible by 7 or 19?

14) 圖 14.1 中有多少個長方形？

How many rectangles are there in figure 14.1?

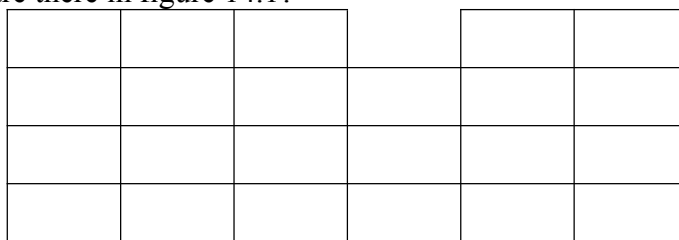


圖 14.1

Figure 14.1

15) 將 $0.\dot{2}3\dot{5}$ 化為分數。

Convert $0.\dot{2}3\dot{5}$ into a fraction.

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.

請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

- 16) 圖 16.1 中，平行四邊形 $ABCD$ 的面積是 240 平方厘米，而 E 、 F 分別是 AB 、 AD 的中點，問陰影部份面積是多少平方厘米？

In figure 16, the area of parallelogram $ABCD$ is 240 cm^2 , E and F are the mid-points of AB and AD respectively. What is the area of the shaded part in cm^2 ?

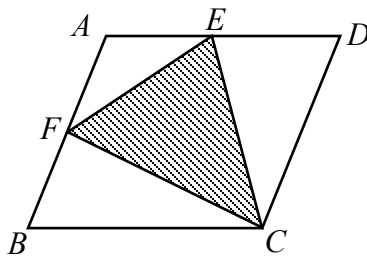


圖 16.1
Figure 16.1

~ 乙部完 ~
~ End of Section B ~

丙部：每題 7 分

Section C – each question carries 7 marks

- 17) 香蕉的數目是橙的 2 倍，如果每人分 3 個橙，則多出了 1 個橙；如果每人分 7 根香蕉，則還差 5 根香蕉。問有多少根香蕉？

The number of bananas is twice of oranges. If each person gets 3 oranges, 1 orange will be left. If each person gets 7 bananas, 5 more bananas will be needed. How many bananas are there?

- 18) 求以下算式的值。

Find the value of the following expression.

$$\frac{1}{7 \times 9} + \frac{1}{9 \times 11} + \frac{1}{11 \times 13} + \dots + \frac{1}{17 \times 19} + \frac{1}{19 \times 21}$$

- 19) 一盒模型飛機售價 117 元。如果小祖買了這模型，他與小芬的餘下的錢之比便是 1:4；如果小芬買了這模型，她與小祖的餘下的錢之比便是 1:10。問他們原來合共有多少元？

The selling price of a model plane is 117 dollars. If Joe has bought the model, the ratio between the amounts of remaining money he and Fanny have will be 1:4. If Fanny has bought the model, the amounts of remaining money she and Joe have will be 1:10. How many dollars do they have in total in the beginning?

- 20) 對於自然數 n ，已知 $127 \div n$ 、 $324 \div n$ 和 $411 \div n$ 三個算式的餘數之和是 12，求 n 的最大值。

For a natural number n , it is given that the sum of the remainders for the three calculations $127 \div n$, $324 \div n$ and $411 \div n$ is 12. Find the largest value of n .

~ 全卷完 ~
~ End of Paper ~