

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One

中一入學前

Mathematics

數學

Mock Paper

模擬試卷

Time allowed for the test: 50 minutes

測驗時間：50分鐘

Instructions:

1. This test contains two sections:

Section A: Questions 1-30

Section B: Questions 31-36

2. Answer ALL questions.

3. Write your answers on the answer sheet.

4. Write your name, class and class number on the answer sheet.

5. You may do your rough work in the blank space of this test booklet and there is no need to rub it out after the test.

6. The use of calculator is not allowed.

學生須知：

1. 本測驗卷共有兩部分：

甲部：第1至第30題

乙部：第31至第36題

2. 全部題目均須作答。

3. 把答案寫在答題紙上。

4. 在答題紙上填寫學生姓名、班別及學號。

5. 學生可利用本測驗卷的空白部分做算草，測驗完畢後無須將算草擦去。

6. 不准使用計算機。

長河中一入學前數學科應試分類練習(小四)

LONG RIVER  長河

Note:

Not all diagrams are drawn to scale.

注意：

部分附圖不依比例繪畫。

SECTION A (60 marks)

Choose the correct answer. You only need to write down the letter preceding the selected answer.

甲部 (60分)

選出正確的答案。學生只須填上所選答案前的英文字母。

1. In the number 50.080, which place value(s) of '0' can be deleted?

- I. units
 - II. tenths
 - III. hundredths
 - IV. thousandths
- A. II only
 - B. IV only
 - C. I and III only
 - D. II and IV only

1. 在 50.080 這個數中，哪個/些位值的「0」可被刪掉？

- I. 個位
 - II. 十分位
 - III. 百分位
 - IV. 千分位
- A. 只有 II
 - B. 只有 IV
 - C. 只有 I 及 III
 - D. 只有 II 及 IV

2. The first six multiples of M are:
 $M, 36, 54, 72, 90, 108$
Which of the following is not a factor of M ?

- A. 1
- B. 2
- C. 4
- D. 9

2. M 的首六個倍數是：
 $M, 36, 54, 72, 90, 108$
下列哪一個數不是 M 的因數？

- A. 1
- B. 2
- C. 4
- D. 9

3. What is the sum of the smallest and the greatest prime numbers between 50 and 90?

- A. 134
- B. 136
- C. 140
- D. 142

3. 在50至90之間，最小和最大的質數之和是多少？

- A. 134
- B. 136
- C. 140
- D. 142

4. What is the largest 4-digit even number that can be divisible by 3?

- A. 9999
- B. 9998
- C. 9997
- D. 9996

4. 能被3整除的最大四位偶數是多少？

- A. 9999
- B. 9998
- C. 9997
- D. 9996

5. There are 225 egg tarts. If each box can hold a maximum of a dozen egg tarts, how many boxes at least are needed for holding all the egg tarts?

- A. 17
- B. 18
- C. 19
- D. 20

5. 現有225個蛋撻。若每個盒子最多可容納一打蛋撻，最少需要盒子多少個才可把所有蛋撻裝好？

- A. 17
- B. 18
- C. 19
- D. 20

6. Which of the following numbers has the value nearest to 1?

- A. $\frac{96}{100}$
- B. 0.89
- C. $1\frac{1}{10}$
- D. 1.08

6. 下列哪一個數的值最接近1?

- A. $\frac{96}{100}$
- B. 0.89
- C. $1\frac{1}{10}$
- D. 1.08

7. If $\frac{\heartsuit}{9} = \frac{56}{\spadesuit}$ and $\frac{\heartsuit}{9}$ is an improper fraction, what numbers can \heartsuit and \spadesuit be?

- A. $\heartsuit = 4, \spadesuit = 126$
- B. $\heartsuit = 7, \spadesuit = 72$
- C. $\heartsuit = 14, \spadesuit = 32$
- D. $\heartsuit = 28, \spadesuit = 18$

7. 如果 $\frac{\heartsuit}{9} = \frac{56}{\spadesuit}$ ，且 $\frac{\heartsuit}{9}$ 是假分數，那麼 \heartsuit 和 \spadesuit 可能是什麼數字？

- A. $\heartsuit = 4, \spadesuit = 126$
- B. $\heartsuit = 7, \spadesuit = 72$
- C. $\heartsuit = 14, \spadesuit = 32$
- D. $\heartsuit = 28, \spadesuit = 18$

8. If $\frac{P}{9}$ is converted into mixed number, it is between $2\frac{4}{9}$ and $2\frac{8}{9}$. Which of the following is the possible value of P ?

- A. 20
- B. 22
- C. 24
- D. 27

8. 若把 $\frac{P}{9}$ 化為帶分數，該帶分數會介乎 $2\frac{4}{9}$ 和 $2\frac{8}{9}$ 之間。下列哪一個數可能是 P 的值？

- A. 20
- B. 22
- C. 24
- D. 27

9. Each of Jane and her sister used $\$58\frac{2}{5}$ to buy a T-shirt for their father and $\$5\frac{3}{5}$ was left. How much did the T-shirt cost?

- A. $\$52\frac{4}{5}$
- B. $\$111\frac{1}{5}$
- C. $\$116\frac{4}{5}$
- D. $\$122\frac{2}{5}$

9. 佳媛和妹妹各拿出 $\$58\frac{2}{5}$ ，一起購買一件恤衫送給爸爸，還餘下 $\$5\frac{3}{5}$ 。這件恤衫的售價是多少？

- A. $\$52\frac{4}{5}$
- B. $\$111\frac{1}{5}$
- C. $\$116\frac{4}{5}$
- D. $\$122\frac{2}{5}$

10. A company will hold a Christmas party in a hotel auditorium. 800 employees will take part in the party. How should the hotel arrange the seats for all of them?

	<u>Number of Rows</u>	<u>Number of Seats per Row</u>
A.	19	41
B.	28	29
C.	42	19
D.	29	26

10. 某公司在酒店禮堂舉行聖誕晚會，有 800 名員工將參加晚會，酒店應怎樣擺放座位，才能容納所有員工？

	<u>行數</u>	<u>每行座位數目</u>
A.	19	41
B.	28	29
C.	42	19
D.	29	26

11. My mother made some cookies. She packed these cookies into boxes of 15 each. After packing, there were 15 boxes of cookies and 10 cookies left. If she repacked them into boxes of 18 each, how many cookies would be left?

- A. 13
- B. 9
- C. 3
- D. 1

11. 媽媽製作了一些曲奇，她把這些曲奇每15塊裝一盒，共可裝15盒，並餘下10塊。如果她改成每18塊裝一盒，把這些曲奇重新包裝後，餘下多少塊？

- A. 13
- B. 9
- C. 3
- D. 1

12. This morning Mr Cheung put a \$500 note into his wallet. Then he paid \$366.8 with cash in a restaurant. The remaining cash in his wallet was \$192.7. How much money was in the wallet before he put the \$500 note?

- A. \$59.5
- B. \$133.2
- C. \$325.9
- D. \$674.1

12. 早上，張先生把一張\$500紙幣放入錢包，然後他在餐廳以現金付賬\$366.8，他的錢包裏還餘下\$192.7。張先生的錢包在放入\$500紙幣前有現金多少？

- A. \$59.5
- B. \$133.2
- C. \$325.9
- D. \$674.1

Sports shoes (each pair)

運動鞋(每雙)

\$275 $\frac{1}{5}$

High-heeled shoes (each pair)

高跟鞋(每雙)

\$225 $\frac{3}{5}$

Add $5\frac{4}{5}$ to any purchase of a pair of shoes to get a pair of socks. Only one pair of socks can be redeemed upon the purchase of a pair of shoes.

購買任何一雙鞋子，加 $5\frac{4}{5}$ 即可換購一雙襪子。購買一雙鞋子只可換購一雙襪子。

13. If Winnie got a pair of socks, how much did she pay at least?

- A. \$281
- B. \$279
- C. $231\frac{2}{5}$
- D. $228\frac{2}{5}$

13. 若慧明換購了一雙襪子，她最少已付款多少？

- A. \$281
- B. \$279
- C. $231\frac{2}{5}$
- D. $228\frac{2}{5}$

14. There were 468g of dried beef in a bag. Wendy ate 150g. How much more should Wendy eat in order to reduce the dried beef in the bag to half of the original amount?

- A. 84g
- B. 92g
- C. 135g
- D. 231g

14. 一袋牛肉乾原有 468g，靜怡吃了 150g。她再吃多少，才能使牛肉乾減至原來的一半？

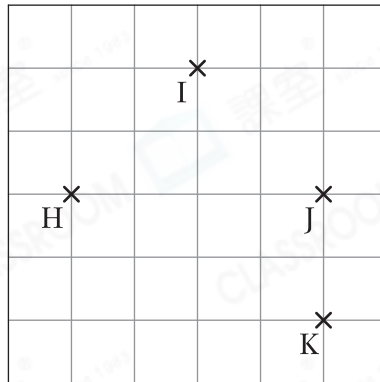
- A. 84g
- B. 92g
- C. 135g
- D. 231g

15. Last month, the number of comic books sold by a bookstore was 368, which was 20 less than 4 times of this month. How many comic books were sold this month?

- A. 97
- B. 87
- C. 85
- D. 72

15. 上月，書店售出368本漫畫書，比本月售出漫畫書的4倍少20本。本月售出漫畫書多少本？

- A. 97
- B. 87
- C. 85
- D. 72

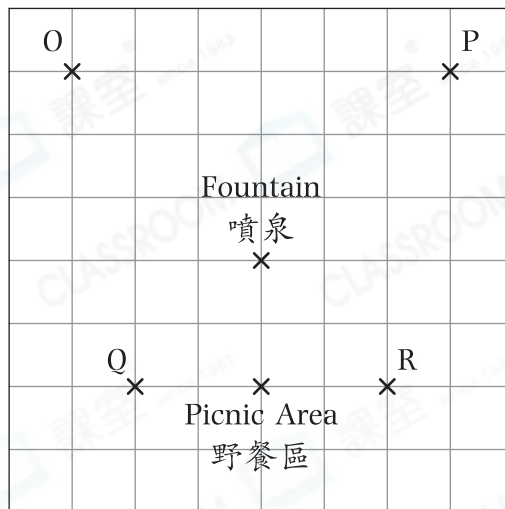


16. In the above figure, Anna went north-east from K to J. When she arrived at J, in which direction is she from H?

- A. north
- B. south-west
- C. north-west
- D. south-east

16. 上圖中，安娜由K向東北出發往J，到達J時，她在H的哪一個方向？

- A. 北
- B. 西南
- C. 西北
- D. 東南



17. Zoe went to the park for a picnic with his parents. Their destination was the Picnic Area. After walking for some time, they found that the Fountain was south-west from them. What was their location at that time on the map?

- A. O
- B. P
- C. Q
- D. R

17. 志彬和父母一起去公園野餐，他們的目的地是野餐區。行了一段時間後，他們發現噴泉在他們的西南方。他們當時是在地圖中的哪一個位置？

- A. O
- B. P
- C. Q
- D. R

18. What kind(s) of the following figures cannot be formed by fitting six isosceles right-angled triangles of the same size together?

- I. square
 - II. parallelogram
 - III. rectangle
- A. I only
B. III only
C. I and II only
D. II and III only

18. 把6個大小相同的等腰直角三角形拼合，不可以拼砌出以下哪個/些圖形？

- I. 正方形
 - II. 平行四邊形
 - III. 長方形
- A. 只有I
B. 只有III
C. 只有I及II
D. 只有II及III

19. Joe draws a straight line across a quadrilateral and cuts it into two shapes. If the lengths of the four sides of the quadrilateral are equal and it has no right angles, which of the following groups of shapes can she get?

- A. square and triangle
B. parallelogram and trapezium
C. trapezium and triangle
D. rectangle and trapezium

19. 子怡在一個四邊形上畫一條直線，把它分割成兩個圖形。如果這個四邊形的四邊長度相等，沒有直角，她可以得出以下哪一組圖形？

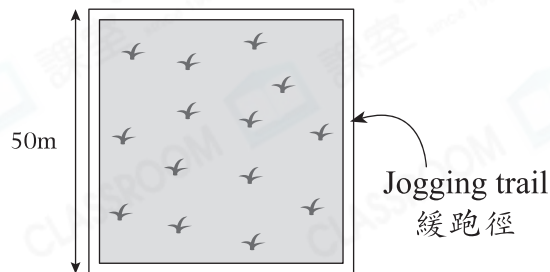
- A. 正方形及三角形
B. 平行四邊形及梯形
C. 梯形及三角形
D. 長方形及梯形

20. Which of the following is not correct?

- A. A trapezium has one right angle at most.
- B. The four sides of a rhombus are equal.
- C. The opposite sides of a parallelogram are equal.
- D. The four angles of a square are equal.

20. 下列哪一項描述是不正確的？

- A. 梯形最多有一個直角。
- B. 菱形的四條邊是相等的。
- C. 平行四邊形的對邊相等。
- D. 正方形的四個角是相等的。

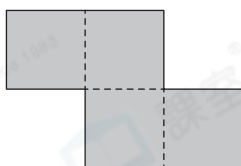


21. The above figure is a square lawn surrounded by a jogging trail of 2m wide. What is the perimeter of the lawn?

- A. 184m
- B. 192m
- C. 200m
- D. 208m

21. 上圖是一塊正方形草地，外圍是一條闊2m的緩跑徑，草地的周界是多少？

- A. 184m
- B. 192m
- C. 200m
- D. 208m

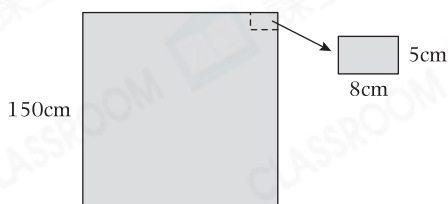


22. The above figure is formed by four squares of the same size. The area of the figure is 256cm^2 . What is its perimeter?

- A. 128cm
- B. 108cm
- C. 80cm
- D. 64cm

22. 上圖由4個大小相同的正方形所組成，面積是 256cm^2 ，它的周界是多少？

- A. 128cm
- B. 108cm
- C. 80cm
- D. 64cm

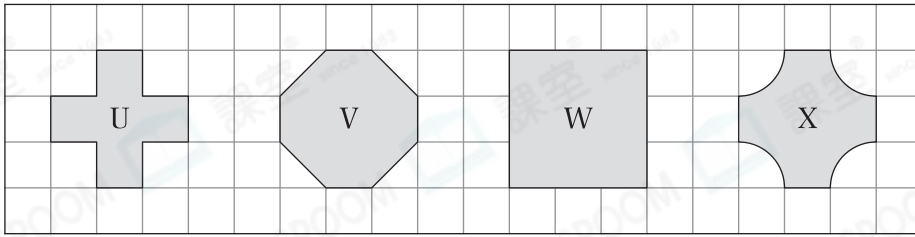


23. Jack has a piece of square colour paper of side 150cm. To make wishing card, he cuts out rectangle of 8cm long and 5cm wide each. How many wishing cards can he cut out from the colour paper at most?

- A. 845
- B. 654
- C. 562
- D. 540

23. 偉杰有正方形顏色紙一張，邊長為150cm。他把顏色紙剪成每張長8cm，闊5cm的長方形來製作願望卡，他最多可剪出願望卡多少張？

- A. 845
- B. 654
- C. 562
- D. 540

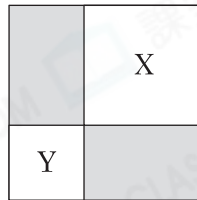


24. Which of the above figures has the shortest perimeter?

- A. U
- B. V
- C. W
- D. X

24. 以上哪個圖形的周界是最短的？

- A. U
- B. V
- C. W
- D. X

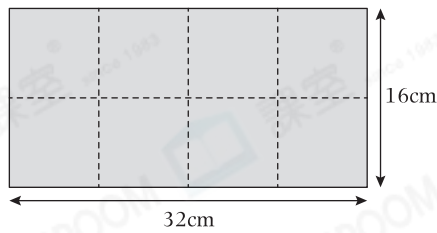


25. In the above figure, X and Y are squares. The areas of X and Y are 64 cm^2 and 25 cm^2 respectively. What is the total area of the shaded part?

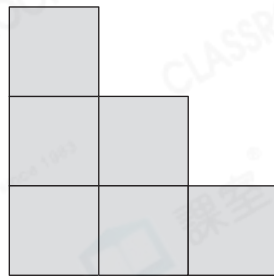
- A. 40 cm^2
- B. 60 cm^2
- C. 80 cm^2
- D. 120 cm^2

25. 上圖中，X和Y是正方形，它們的面積分別是 64 cm^2 和 25 cm^2 。陰影部分的總面積是多少？

- A. 40 cm^2
- B. 60 cm^2
- C. 80 cm^2
- D. 120 cm^2



26. The above figure is a rectangle of 32cm long and 16cm wide. Janny cuts along the dotted lines and divides it into 8 squares of the same size. Then she puts 6 of the squares together to form a new figure, as shown below. What is the perimeter of the new figure?



- A. 48cm
- B. 64cm
- C. 84cm
- D. 96cm

26. 上圖是一個長32cm和闊16cm的長方形。佳佳沿虛線把它分割成8個大小相同的正方形，並把其中6個正方形拼砌成一個新圖形，如下圖所示。這個新圖形的周界是多少？

- A. 48cm
- B. 64cm
- C. 84cm
- D. 96cm



27. Abby has cut three squares of the same size along the dotted lines from a piece of rectangular floral cloth as shown above. If the length and width of the floral cloth are 5 times and 3 times of the side of a square respectively, what is the area of the remaining part?

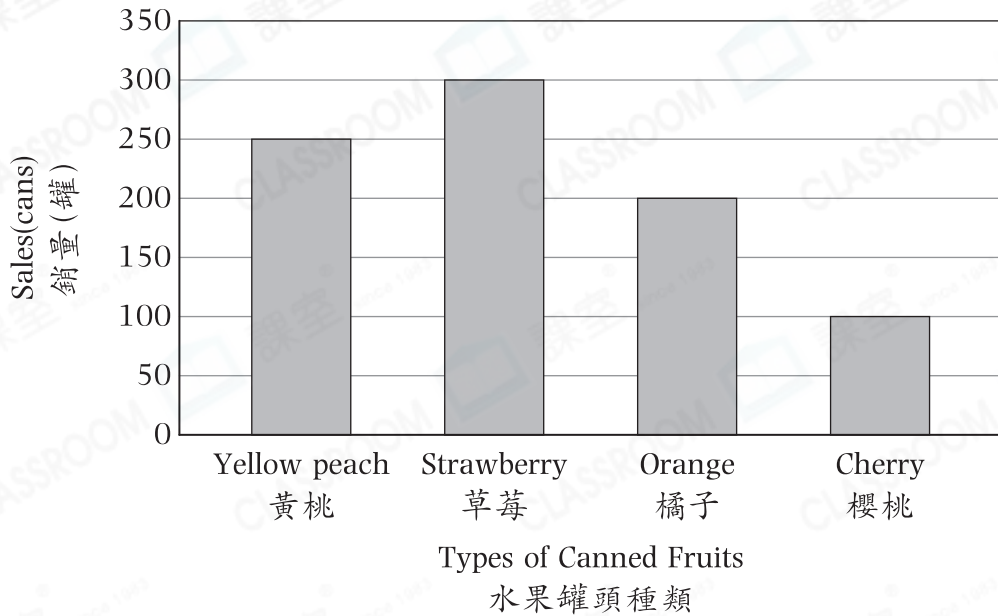
- A. 735cm^2
- B. 588cm^2
- C. 329cm^2
- D. 147cm^2

27. 安冉把一塊長方形花布，沿着虛線剪去三個大小相同的正方形，如上圖所示。如果花布的長和闊分別是正方形邊長的5倍和3倍，餘下部分的面積是多少？

- A. 735cm^2
- B. 588cm^2
- C. 329cm^2
- D. 147cm^2

Sales of the Canned Fruits Yesterday

昨天水果罐頭的銷量



28. According to the above graph, which of the following is correct?

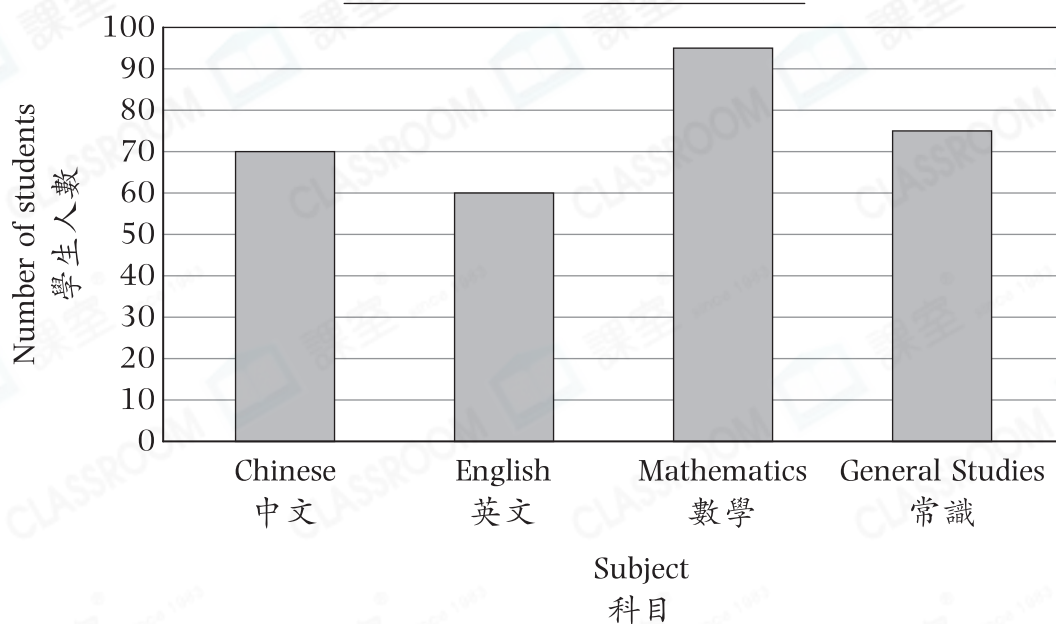
- A. The total sales of canned fruits were 900 cans.
- B. The sales of two types of canned fruits were more than 200 cans.
- C. The difference between the highest and lowest sales of canned fruits were 250 cans.
- D. The sales of the canned orange were half of that of the canned cherry.

28. 根據上圖，以下哪一項是正確的？

- A. 水果罐頭的總銷量是900罐。
- B. 有2種水果罐頭的銷量超過200罐。
- C. 銷量最高和最低的水果罐頭相差250罐。
- D. 橘子罐頭的銷量是櫻桃罐頭的一半。

The Most Favourite Subjects of Long River Primary School Students

長河小學學生最喜歡的科目



29. By the one-student-one-vote scheme, students of Long River Primary School voted for their most favourite subjects and the result was given above. It was known that 8 students were absent from the voting and there were 156 boys in Long River Primary School, how many girls were there?

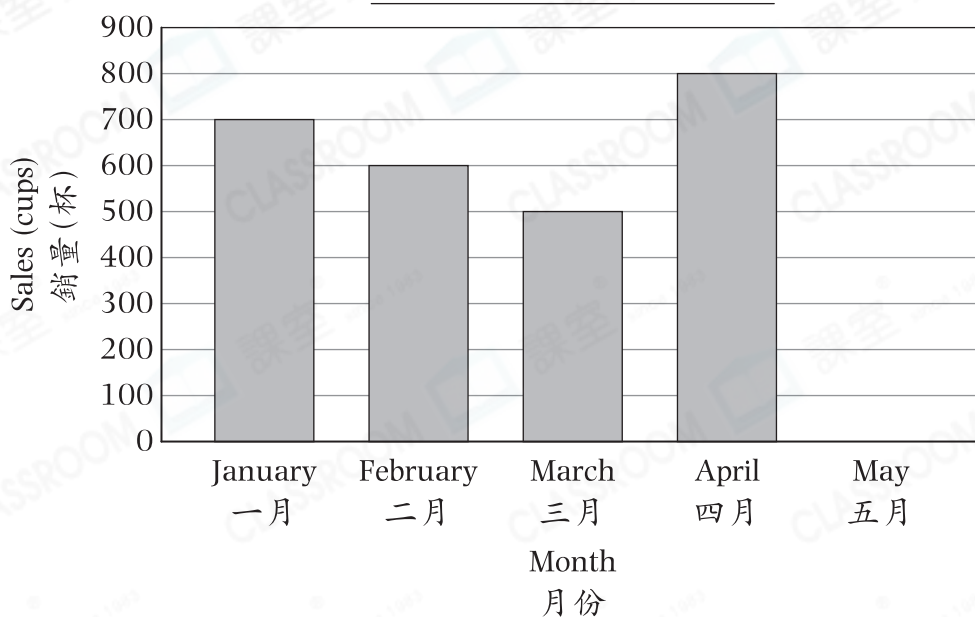
- A. 142
- B. 146
- C. 152
- D. 154

29. 長河小學的學生以一人一票的方式選出他們最喜歡的科目，結果如上。已知投票當日有8名學生缺席投票，並且長河小學共有156名男學生，即有女學生多少人？

- A. 142
- B. 146
- C. 152
- D. 154

Sales of Juice in the Past Five Months

過去五個月果汁的銷量



30. The employee wanted to use the above graph to show the sales of juice in the past five months. However, he forgot to indicate the sales of juice in May in the graph. If the total sales of juice in the past five months were 3400 cups, how many cups of juice were sold in May?

- A. 680
- B. 700
- C. 800
- D. 900

30. 店員嘗試用上圖來表示過去五個月果汁的銷量，但他忘記標示五月的果汁銷量。如果過去五個月果汁的總銷量是3400杯，五月售出果汁多少杯？

- A. 680
- B. 700
- C. 800
- D. 900

End of Section A

甲部完

SECTION B (40 marks)

Working steps must be shown in answering questions in this section unless specified otherwise.

乙部 (40分)

除特別指明外，在回答本部問題時，須列出計算步驟。

Happy Supermarket 快樂超級市場

The standard price of each fork is \$17. Customers can enjoy the following offers on Tuesday:

每把叉子的正價為\$17，顧客在星期二可享有以下優惠：

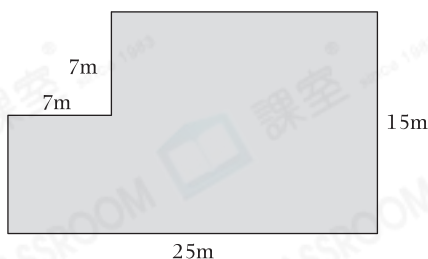
Offer 1 優惠 1	\$120 for 8 forks 以 \$120 買 8 把叉子
Offer 2 優惠 2	\$200 for 15 forks 以 \$200 買 15 把叉子

31. (a) Dave had \$200. He bought some forks at the standard price. How many forks could he buy at most and how much was left? (Give the answer only) [2 marks]

(b) Last Tuesday, the manager of a restaurant bought 120 forks in the Happy Supermarket. How much did he pay at least? [4 marks]

31. (a) 智成有\$200，他以正價購買叉子，他最多可購買叉子多少把及餘下款項多少？(只須寫出答案) [2分]

(b) 上星期二，餐廳經理在快樂超級市場購買了120把叉子，他最少須付款多少？ [4分]



32. The above shows the plan of my uncle's farmland.

(a) What is the area of the farmland? [4 marks]

(b) Fence will be built around the farmland. The cost of building the fence is \$79 per metre. What is the cost for building the fence? [4 marks]

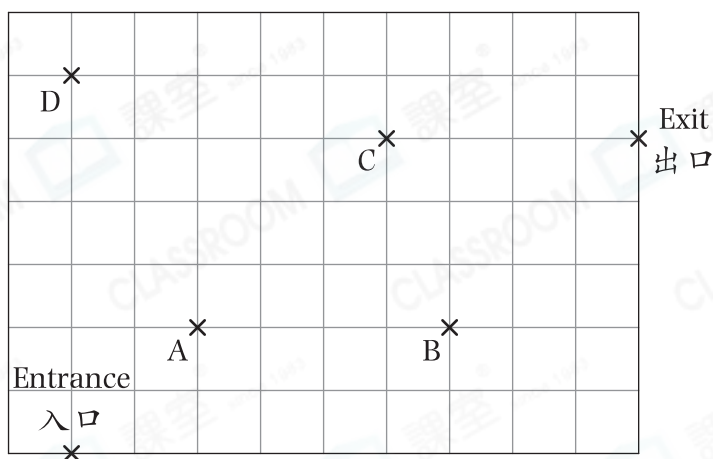
(c) My uncle has another piece of rectangular farmland. The area of it is 96m^2 with each side measured in whole metres. Draw on the answer sheet one of the possible shapes of my uncle's farmland. [2 marks]

32. 上圖是伯父的耕地平面圖。

(a) 這耕地的面積是多少？ [4分]

(b) 耕地的周圍要築起圍欄，每米的費用是\$79，建築費用是多少？ [4分]

(c) 伯父另有一塊長方形的耕地，面積是 96m^2 。每邊都是以每米量度。在答題紙上畫出伯父的耕地其中一種可能的形狀。 [2分]



33. The above is the floor plan of the food carnival. Miss Leung ran a snack shop in Area B.

(a) Area C is in the south of the Exit. What is the direction of Miss Leung's snack shop from the Exit? (Give the answer only) [2 marks]

(b) Miss Leung put 80kg of nuts in her snack shop for sale. There were $24\frac{5}{8}$ kg of cashews and $33\frac{7}{8}$ kg of pistachios. The rest were almonds. How many kilograms of almonds were there in Miss Leung's snack shop? [4 marks]

33. 上圖是美食嘉年華的平面圖。梁小姐經營的零食店在區域B。

(a) 區域C在出口的南方，梁小姐的零食店在出口的哪一方？(只須寫出答案) [2分]

(b) 梁小姐在零食店擺放了80kg堅果出售，其中有 $24\frac{5}{8}$ kg腰果， $33\frac{7}{8}$ kg開心果，其餘的是杏仁。梁小姐的零食店有杏仁多少？ [4分]

Vacuum cup
保溫杯
\$96.40

Membership price
會員價
\$89.60

Electric kettle
電水煲
\$214.90

Membership price
會員價
\$205.20

34. The above shows the prices of the vacuum cup and electric kettle in a department store. Holders of the membership card can enjoy the membership price, but it could not be used together with any other promotion offers. My father wanted to buy one vacuum cup and one electric kettle.

(a) If my father had the membership card, how much should he pay?
[4 marks]

(b) The department store held a promotion and gave out vouchers of \$20 each. A customer could use one voucher for any purchase up to \$300 or more. Should my father use the voucher or the membership card in order to pay less? Explain.
[2 marks]

34. 以上是百貨公司保溫杯和電水煲的售價。凡持會員卡的顧客可享有會員價，但會員卡不可與其他優惠同時使用。爸爸想買1個保溫杯和1個電水煲。

(a) 如果爸爸持有會員卡，他應付款多少？ [4分]

(b) 百貨公司舉行促銷活動，並派發每張價值\$20的代用券，凡購物滿\$300，即可使用代用券一張。付款時，爸爸應使用代用券或會員卡才可取得較大的優惠？試解釋。 [2分]

35. Figure 1 shows a piece of parallelogram paper. It is cut along the dotted line into two shapes. These two shapes are then put together to form a rectangle, as shown in Figure 2.

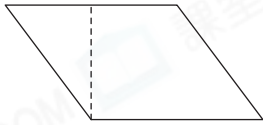


Figure 1
圖一

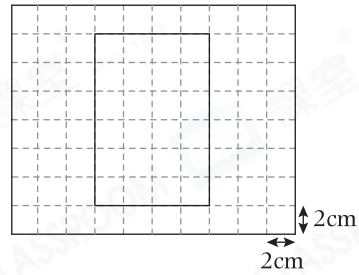


Figure 2
圖二

(a) The side of each small square is 2cm. What is the perimeter of the rectangle?
[4 marks]

(b) On the answer sheet, draw a straight line to show how these two shapes are put together to form the rectangle, as shown in Figure 2.
[2 marks]

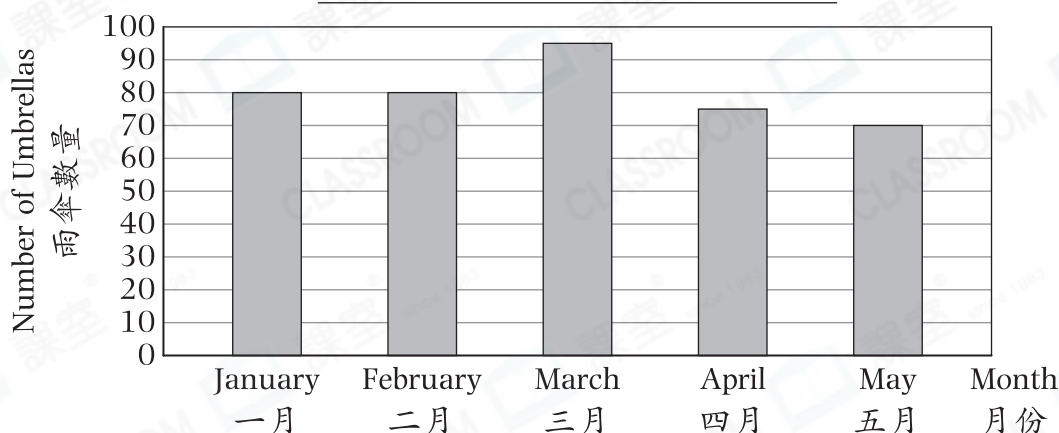
35. 圖一是一張平行四邊形手工紙，把它沿着虛線剪下，分割出兩個圖形。利用這兩個分割出來的圖形，可拼合成一個長方形，如圖二所示。

(a) 每個小正方形的邊長為 2cm，這長方形的周界是多少？ [4分]

(b) 在答題紙上加上直線，以表示如何將這兩個分割出來的圖形拼合成如圖二所示的長方形。 [2分]

Sales of Umbrellas in a Convenience Store from January to May

便利店一月至五月雨傘的銷量



36. The above graph shows the sales of umbrellas in a convenience store from January to May.

(a) How many umbrellas were sold in the first quarter?
(Give the answer only)
[2 marks]

(b) The convenience store adjusted the price of each umbrella from \$29 to \$33 in May. The manager believed that the income by selling umbrellas in May would be decreased when compared with that in April. Do you agree with him? Explain.
[4 marks]

36. 上圖是便利店一月至五月雨傘的銷量。

(a) 第一季共售出雨傘多少把？(只須寫出答案)
[2分]

(b) 便利店於五月將每把雨傘的售價由\$29調整為\$33。經理認為五月售出雨傘的收入比四月少。你同意嗎？試解釋。
[4分]

End of Test Paper

測驗卷完

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One Mathematics Mock Paper

中一入學前數學科模擬試卷

Answer Sheet

答題紙

Name of Student

學生姓名：_____ (中文)

Class

班別：_____ ()

Section A (60 marks) You only need to write down the letter preceding the selected answer. (2 marks each)

甲部 (60分)

學生只須填上所選答案前的英文字母。(每題2分)

1.	11.	21.
2.	12.	22.
3.	13.	23.
4.	14.	24.
5.	15.	25.
6.	16.	26.
7.	17.	27.
8.	18.	28.
9.	19.	29.
10.	20.	30.

For Teacher's Use

供教師用

		Number 數	Shape & Space 圖形與空間	Measures 度量	Data Handling 數據處理
Section A 甲部	Item 題目	1-15	16-20	21-27	28-30
	Marks 分數				
Section B 乙部	31(a)				
	31(b)				
	32(a)				
	32(b)				
	32(c)				
	33(a)				
	33(b)				
	34(a)				
	34(b)				
	35(a)				
	35(b)				
	36(a)				
36(b)					
(Sections A + B) Total (甲部及乙部) 合計					
Grand Total 總計					

Section B (40 marks) Working steps must be shown in answering questions in this section unless specified otherwise.

乙部 (40分) 除特別指明外，在回答本部問題時，須列出計算步驟。

		Marks 估分	Marks 得分
31(a).	He could buy _____ forks at most and \$ _____ was left. 他最多可購買 _____ 把叉子及餘下 \$ _____ 。	2	<input type="text"/>
31(b).		4	<input type="text"/>
32(a).		4	<input type="text"/>
32(b).		4	<input type="text"/>
32(c).		2	<input type="text"/>

Go On To Next Page

轉下頁續答

Marks
估分

Marks
得分

33(a).

Miss Leung's snack shop is in the _____
from the Exit.

梁小姐的零食店在出口的 _____ 方。

2

33(b).

4

34(a).

4

34(b).

Because
因為

My father should use the _____ in order
to pay less.

爸爸應使用 _____ 才可取得較大的優惠。

2

Go On To Next Page

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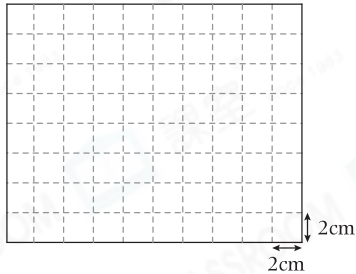
Marks
估分

Marks
得分

35(a).

4

35(b).



2

36(a).

In the first quarter, _____ umbrellas were sold.

第一季共售出 _____ 把雨傘。

2

36(b).

Because

因為

* agree / disagree (*Circle the answer)

* 同意 / 不同意 (*圈出答案)

4

END
完