

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One

中一入學前

Mathematics

數學

Mock Paper 4

模擬試卷(四)

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分類練習 + 模擬試卷(小五)

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. What is the sum of the smallest and the greatest multiples of 11 between 60 and 130?

- A. 55
- B. 66
- C. 121
- D. 187

1. 在 60 至 130 之間，11 的最小和最大的倍數之和是多少？

- A. 55
- B. 66
- C. 121
- D. 187

2. 8 tokens weigh $184\frac{4}{5}$ g altogether. How much does one token weigh on average?

- A. $23\frac{1}{20}$ g
- B. $23\frac{1}{10}$ g
- C. $23\frac{1}{5}$ g
- D. $23\frac{3}{10}$ g

2. 8 個代幣共重 $184\frac{4}{5}$ g，平均一個代幣的重量是多少？

- A. $23\frac{1}{20}$ g
- B. $23\frac{1}{10}$ g
- C. $23\frac{1}{5}$ g
- D. $23\frac{3}{10}$ g

3.

$$99 \times 181 = ?$$

- A. $100 \times 181 - 181$
- B. $100 \times 180 - 100$
- C. $100 \times 181 - 1$
- D. $100 \times 180 - 99$

4. If $\frac{\star}{6} = \frac{24}{\ast}$ and $\frac{\star}{6}$ is a proper fraction, what numbers can \star and \ast be?

- A. $\star = 2, \ast = 12$
- B. $\star = 3, \ast = 48$
- C. $\star = 4, \ast = 32$
- D. $\star = 6, \ast = 24$

4. 如果 $\frac{\star}{6} = \frac{24}{\ast}$ ，且 $\frac{\star}{6}$ 是真分數，那麼 \star 和 \ast 可能是什麼數字？

- A. $\star = 2, \ast = 12$
- B. $\star = 3, \ast = 48$
- C. $\star = 4, \ast = 32$
- D. $\star = 6, \ast = 24$

5. Community Centre will hold a health seminar in its community hall. There will be an audience of 600 people. How should the Community Centre arrange the seats for all of them?

	<u>Number of Rows</u>	<u>Number of Seats per Row</u>
A.	17	34
B.	19	27
C.	27	22
D.	34	18

5. 社區中心將會在社區禮堂舉行健康講座，觀眾人數為600人，社區中心應怎樣擺放座位，才可容納所有觀眾？

	<u>行數</u>	<u>每行座位數目</u>
A.	17	34
B.	19	27
C.	27	22
D.	34	18

6. There are 720 students in Star School. $\frac{1}{5}$ of them are P5 students and $\frac{4}{9}$ of P5 students are girls. How many P5 boys in the school?

- A. 56
- B. 64
- C. 80
- D. 100

6. 星星學校有720名學生， $\frac{1}{5}$ 是五年級學生，五年級學生中女生佔 $\frac{4}{9}$ 。五年級男生有多少名？

- A. 56
- B. 64
- C. 80
- D. 100

7. What is the result of multiplying the smallest 2-digit even number and the largest number with 2 decimal places within 20?

- A. 19.89
- B. 19.99
- C. 199.9
- D. 209.9

7. 最小的兩位偶數與20以內最大的兩位小數相乘的結果是多少？

- A. 19.89
- B. 19.99
- C. 199.9
- D. 209.9

8. What is the sum of all the factors of 49?

- A. 64
- B. 57
- C. 56
- D. 14

8. 把49的所有因數相加的結果是多少？

- A. 64
- B. 57
- C. 56
- D. 14

9. A bag of red beans weighed $20\frac{4}{5}$ kg. A chef used $12\frac{1}{4}$ kg yesterday. He buys $10\frac{3}{10}$ kg today. How many red beans are there now?

- A. $8\frac{11}{20}$ kg
- B. $12\frac{11}{20}$ kg
- C. $18\frac{1}{4}$ kg
- D. $18\frac{17}{20}$ kg

9. 一袋紅豆重 $20\frac{4}{5}$ kg。廚師昨天用去 $12\frac{1}{4}$ kg，今天買回 $10\frac{3}{10}$ kg。現有紅豆多少？

- A. $8\frac{11}{20}$ kg
- B. $12\frac{11}{20}$ kg
- C. $18\frac{1}{4}$ kg
- D. $18\frac{17}{20}$ kg

10. Ken trained for 1.5 hours every day. How many hours did he train from 3rd April to 20th April?

- A. 12 hours
- B. 25.5 hours
- C. 27 hours
- D. 28.5 hours

10. 文浩每天訓練1.5小時。由4月3日至4月20日，他訓練了多少小時？

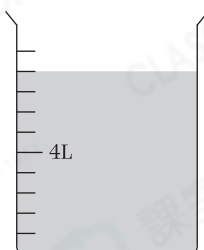
- A. 12小時
- B. 25.5小時
- C. 27小時
- D. 28.5小時

11. If $\frac{\Phi}{3} + \frac{\Delta}{9} = 2$, which of the following is equal to 18?

- A. $\Phi + \Delta$
- B. $2\Phi + \Delta$
- C. $\Phi + 3\Delta$
- D. $3\Phi + \Delta$

11. 如果 $\frac{\Phi}{3} + \frac{\Delta}{9} = 2$ ，那麼下列哪一項等於18？

- A. $\Phi + \Delta$
- B. $2\Phi + \Delta$
- C. $\Phi + 3\Delta$
- D. $3\Phi + \Delta$



12. How much water is there in the above container?

- A. $7\frac{1}{5}$ L
- B. 8L
- C. 9L
- D. $11\frac{1}{4}$ L

12. 上圖的容器中共有水多少？

- A. $7\frac{1}{5}$ L
- B. 8L
- C. 9L
- D. $11\frac{1}{4}$ L

13. What is the difference between the values of '8' and '2' in the number 5183.62?

- A. 0.06
- B. 0.78
- C. 6
- D. 79.98

13. 在 5183.62 這個數中，「8」與「2」的數值相差多少？

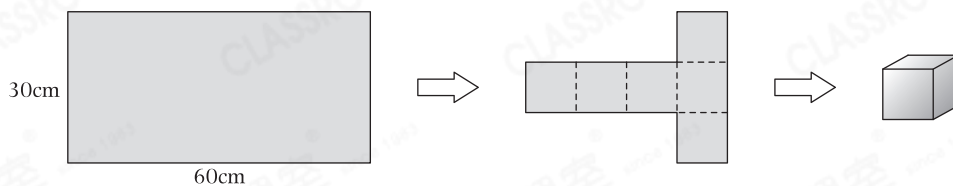
- A. 0.06
- B. 0.78
- C. 6
- D. 79.98

14. The light tower is in the northeast of the boat. What direction is the boat from the light tower?

- A. southeast
- B. northeast
- C. southwest
- D. northwest

14. 燈塔在船的東北方，那麼船在燈塔的哪一方？

- A. 東南
- B. 東北
- C. 西南
- D. 西北



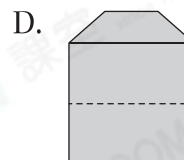
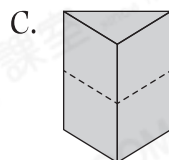
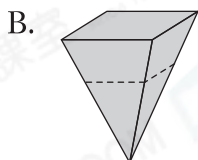
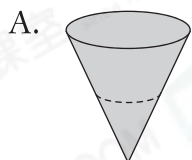
15. The above net of a cube is cut from a piece of rectangular paper of length 60cm and width 30cm. The net is then folded into a cube. What is the longest possible side of the cube formed?

- A. $7\frac{1}{2}$ cm
- B. 10cm
- C. 15cm
- D. 20cm

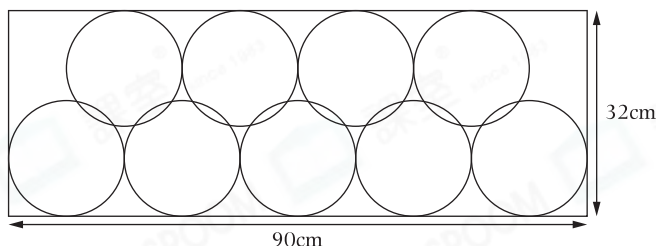
15. 用一張長 60cm、闊 30cm 的長方形卡紙，剪出一個如上的正方體摺紙圖樣。這圖樣摺出的正方體的邊長最長可以是多少？

- A. $7\frac{1}{2}$ cm
- B. 10cm
- C. 15cm
- D. 20cm

16. When cut the following solids along the dotted lines horizontally, which cut section obtained is a triangle?



16. 下列哪一個立體沿虛線水平切開，所得的截面是三角形？



17. In the above figure, all circles are the same size. What is the radius of each circle?

- A. 8cm
- B. 9cm
- C. 16cm
- D. 18cm

17. 上圖中，所有圓的大小都相同，每個圓的半徑是多少？

- A. 8cm
- B. 9cm
- C. 16cm
- D. 18cm

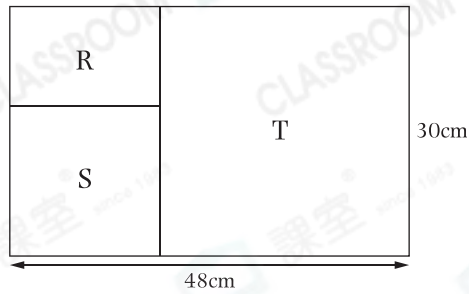


18. If all of the above 5 plastic sticks are used together, which of the following quadrilaterals can be formed?

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

18. 如果同時使用以上五條膠棒，可以組成以下哪種四邊形？

- A. 平行四邊形
- B. 梯形
- C. 正方形
- D. 長方形

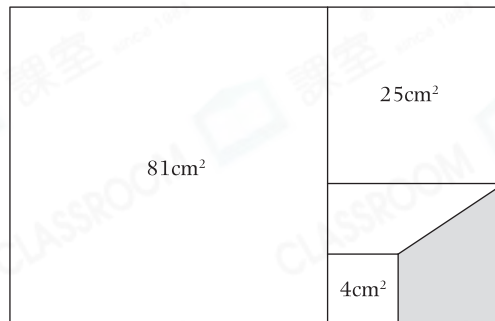


19. In the above figure, S and T are squares. Find the area of R.

- A. 216cm^2
- B. 324cm^2
- C. 900cm^2
- D. 1440cm^2

19. 在上圖，S和T是正方形。求R的面積。

- A. 216cm^2
- B. 324cm^2
- C. 900cm^2
- D. 1440cm^2



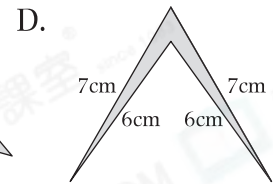
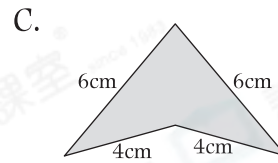
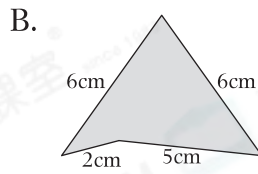
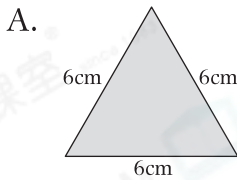
20. The above figure is formed by three squares and two trapeziums. What is the area of the shaded part?

- A. 5cm^2
- B. 9cm^2
- C. 20cm^2
- D. 30cm^2

20. 上圖是由三個正方形和兩個梯形拼砌而成，陰影部分的面積是多少？

- A. 5cm^2
- B. 9cm^2
- C. 20cm^2
- D. 30cm^2

21. Which of the following figures has the longest perimeter?



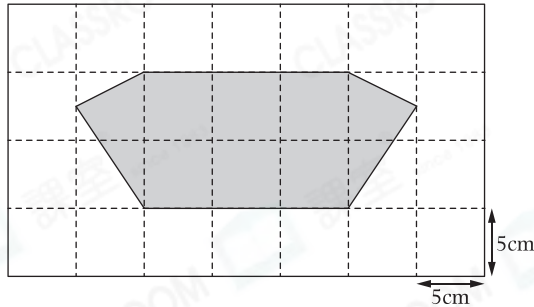
21. 下圖中，哪個圖形的周界最長？

22. There is a butter cuboid of 15cm long, 6cm wide and 10cm high. To get the largest cube, how much should we cut off from the cuboid?

- A. 1000cm^3
- B. 900cm^3
- C. 684cm^3
- D. 216cm^3

22. 一塊長方體牛油，長15cm，闊6cm和高10cm。要把牛油切去多少才可得到一個最大的正方體？

- A. 1000cm^3
- B. 900cm^3
- C. 684cm^3
- D. 216cm^3

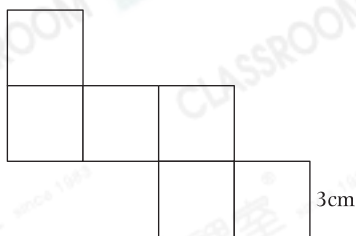


23. In the above figure, what is the area of the shaded part?

- A. 250cm^2
- B. 200cm^2
- C. 175cm^2
- D. 8cm^2

23. 上圖中，陰影部分的面積是多少？

- A. 250cm^2
- B. 200cm^2
- C. 175cm^2
- D. 8cm^2



24. The above figure is the net of a box.
What is the volume of the box?

- A. 6cm^3
- B. 9cm^3
- C. 27cm^3
- D. 36cm^3

24. 上圖是一個盒子的摺紙圖樣。這個盒子的體積是多少？

- A. 6cm^3
- B. 9cm^3
- C. 27cm^3
- D. 36cm^3

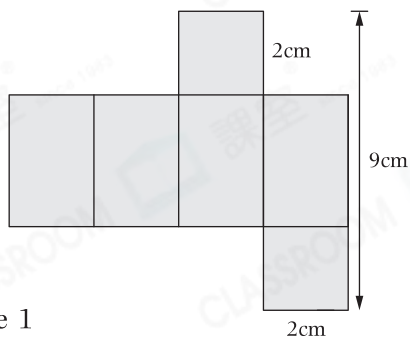


Figure 1
圖一

25. After the small cuboid formed by the net in Figure 1 is combined with the solid in Figure 2, a large cuboid of 7cm long, 4cm wide and 3cm high is formed. What is the volume of the solid in Figure 2?

- A. 84cm^3
- B. 64cm^3
- C. 44cm^3
- D. 20cm^3

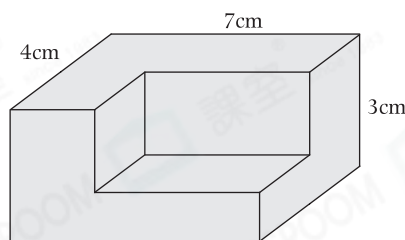


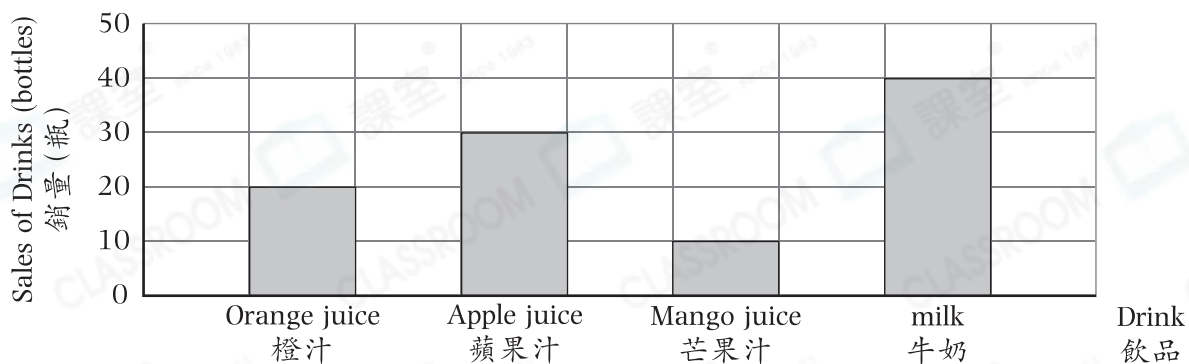
Figure 2
圖二

25. 把圖一的摺紙圖樣摺成小長方體後，剛好可以和圖二的立體組成一長7cm、闊4cm和高3cm的大長方體。圖二的體積是多少？

- A. 84cm^3
- B. 64cm^3
- C. 44cm^3
- D. 20cm^3

Sales of drinks in a Drink Shop Yesterday

飲品店昨天各種飲品的銷量



26. It was known that a bottle of juice cost \$12, which was \$5 cheaper than a bottle of milk. What was the total income of the drink shop yesterday?

- A. \$140
- B. \$920
- C. \$1000
- D. \$1400

26. 已知每瓶果汁售\$12，比每瓶牛奶便宜了\$5。飲品店昨天的總收入是多少？

- A. \$140
- B. \$920
- C. \$1000
- D. \$1400

27. Juno wants to show the number of each kind of stamps that he collected last week. Which of the following is/are the suitable graph(s) that he should use?

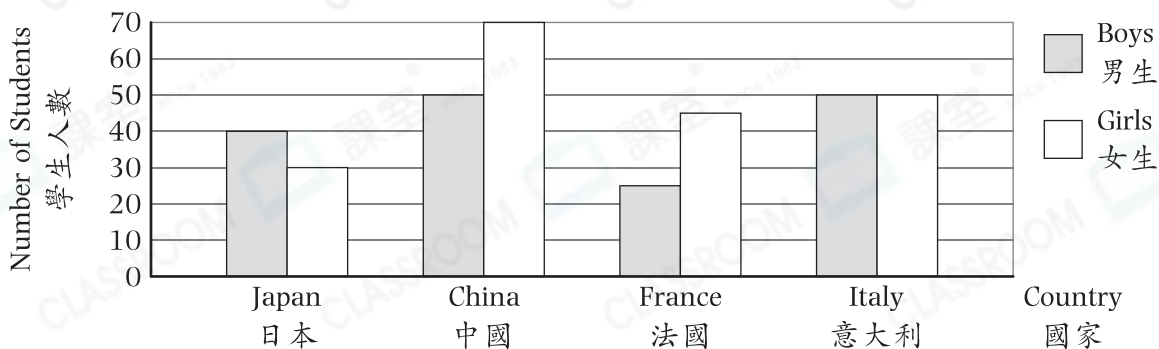
- I. Pictogram
 - II. Bar chart
 - III. Compound bar chart
- A. I only
 - B. I and II only
 - C. I and III only
 - D. II and III only

27. 俊偉想用統計圖來表示上星期收集到各類郵票的數量，他選用以下哪一/幾種統計圖較為合適？

- I. 象形圖
 - II. 棒形圖
 - III. 複合棒形圖
- A. 只有I
 - B. 只有I和II
 - C. 只有I和III
 - D. 只有II和III

Favourite Countries of Students

學生最喜愛的國家



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

- A. Least boys like Japan.
- B. Most girls like China.
- C. 30 boys like France.
- D. 50 students like Italy.

28. 根據上圖，以下哪一項是正確的？

- A. 最少男生喜歡日本。
- B. 最多女生喜歡中國。
- C. 有30名男生喜歡法國。
- D. 有50名學生喜歡意大利。

29. Which of the following is an equation?

- A. $(h + 6)$
- B. $15 = 2h$
- C. $15 = 2 + 13$
- D. $8 - 6$

29. 下列哪一項是方程？

- A. $(h + 6)$
- B. $15 = 2h$
- C. $15 = 2 + 13$
- D. $8 - 6$

30. If $7a + 4 = 130$, then $\frac{a}{3} = ?$

- A. 24
- B. 18
- C. 12
- D. 6

30. 如果 $7a + 4 = 130$ ，那麼 $\frac{a}{3} = ?$

- A. 24
- B. 18
- C. 12
- D. 6

End of Section A

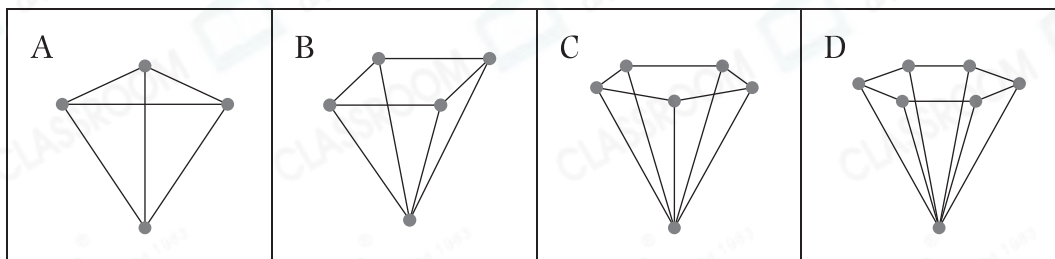
甲部完

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。



31. In the above table, the solids are made up by plastic sticks with the same length and plastic balls.

(a) Figure B is a pyramid whose base is a quadrilateral. To make this solid, how many plastic sticks and plastic balls are needed at least? (Give the answer only) [2 marks]

(b) By using all plastic sticks and plastic balls of the above solids, how many cube(s) can be formed at most? (Give the answer only) [2 marks]

(c) If each plastic ball costs $\$5\frac{1}{2}$ and each plastic stick costs $\$1\frac{1}{5}$, how much is the total material fee of Figure D? [4 marks]

31. 上表中的立體是由長度相等的膠棒和膠珠製作而成的。

(a) 圖B是一個四角錐，要製作這立體，最少需要多少枝膠棒和多少粒膠珠？(只須寫出答案) [2分]

(b) 用以上立體的所有膠棒和膠珠，最多可以組成正方體多少個？(只須寫出答案) [2分]

(c) 如果每粒膠珠售 $\$5\frac{1}{2}$ ，每枝膠棒售 $\$1\frac{1}{5}$ ，圖D的材料費是多少？ [4分]

Peak Tram tickets 山頂纜車車票	
Adult 成人	\$x
Child(aged 11 or under) 小童(11歲或以下)	\$14

32. Sam was 10 years old. He went to the Peak Galleria with his parents by peak tram yesterday. They paid \$88 altogether for the fares. According to the above table, what was the fare for an adult? (Use equation to solve the problem and show your working) [4 marks]

32. 志和今年10歲，昨天他和父母一起乘搭纜車到山頂廣場，他們共付車費\$88。根據上表，成人車費是多少？(須用方程列式計算) [4分]

33. In a competition, Carrie finished the race in 56 seconds. Cindy took $2\frac{1}{2}$ times of Carrie's time. Alice took $\frac{3}{7}$ less than Cindy's time.

- (a) How long did Cindy take to finish the race? [4 marks]
- (b) How much more time that Alice took to finish the race than that of Carrie? [4 marks]

33. 在一次比賽中，海玲用56秒完成比賽，敏芳用去的時間是海玲的 $2\frac{1}{2}$ 倍，雪兒用的時間比敏芳少 $\frac{3}{7}$ 。

- (a) 敏芳共用了多少時間完成比賽? [4分]
- (b) 雪兒完成比賽所用去的時間，比海玲的多多少? [4分]

34. A snack shop has 80 packets of chocolates. Each packet of chocolate weighs 0.24kg.

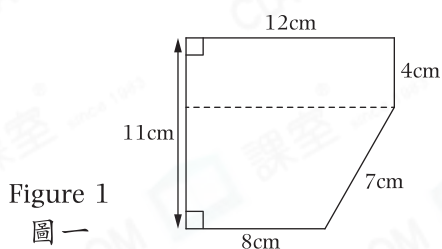
(a) What is the total weight of the chocolates? (Give the answer only) [2 marks]

(b) The price of chocolate is \$210 per kilogram. How much will the shop get if all the chocolates are sold? (Give the answer only) [2 marks]

34. 零食店有 80 包巧克力，每包巧克力重 0.24kg。

(a) 巧克力共重多少？(只須寫出答案) [2分]

(b) 每公斤巧克力售 \$210，如果把全部的巧克力售出，零食店將收得款項多少？(只須寫出答案) [2分]

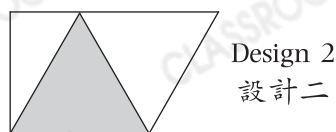


35. (a) Cutting along the dotted line in Figure 1 to remove a rectangle, a trapezium is obtained as shown in Figure 2. What is the area of the trapezium? [4 marks]

(b) Fay used Figure 2 to design logos as shown below. She believes that the areas of the shaded parts in the two designs are different. Do you agree? Explain. [4 marks]

35. (a) 沿着圖一的虛線剪去一個長方形後，得出圖二所示的梯形。梯形的面積是多少？ [4分]

(b) 下圖顯示曉瑩利用圖二設計的標誌。她認為兩個設計的陰影部分的面積不一樣。你同意嗎？試解釋。 [4分]

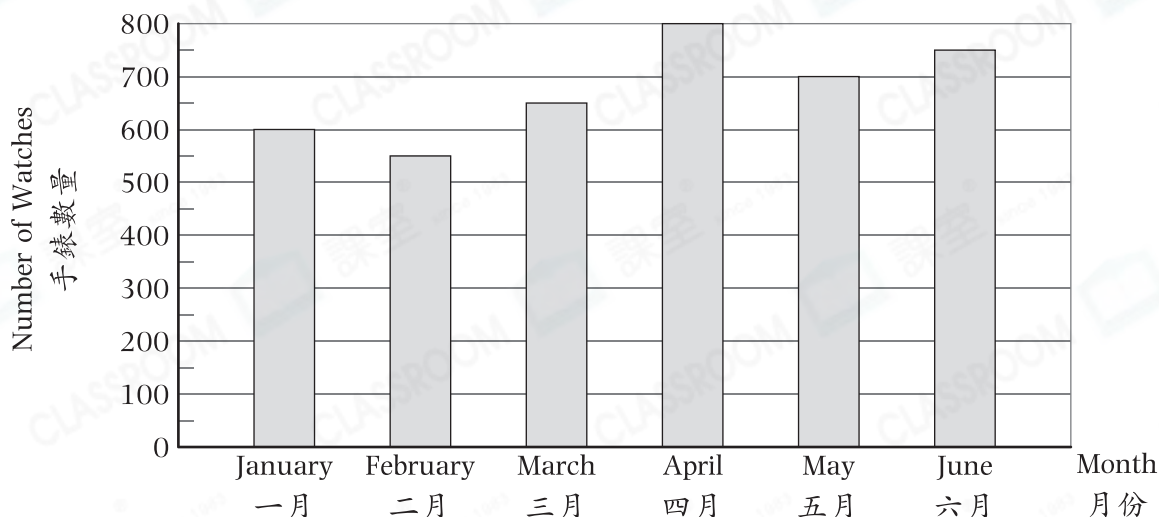


36. The following graph shows the sales of watches in the first half year in the department store.

36. 下圖顯示百貨公司上半年手錶的銷量。

Sales of Watches of the Department Store in the First Half Year

百貨公司上半年手錶的銷量



(a) In which two months the sales of watches were greater than 700 watches? (Give the answer only) [2 marks]

(a) 哪兩個月份手錶的銷量高於700隻？(只須寫出答案)[2分]

(b) The price of each watch was the same. The sales amount of watches was \$360 000 in January. How much was the sales amount of watches in April? [4 marks]

(b) 每隻手錶的售價相同。一月份手錶的銷售額是\$360 000，那麼四月份手錶的銷售額是多少？ [4分]

(c) What fraction of the sales in the first half year was that in the first quarter? (Give the answer only) [2 marks]

(c) 第一季度手錶的銷量佔上半年的幾分之幾？(只須寫出答案) [2分]

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One Mathematics Mock Paper 4

中一入學前數學科模擬試卷(四)

Answer Sheet

答題紙

Name of Student

學生姓名：_____ (中文)

Class

_____ (English)

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	Algebra 代數
Section A 甲部	Item 題目	1-13	14-18	19-25	26-28	29-30
	Marks 分數					
Section B 乙部	31(a)					
	31(b)					
	31(c)					
	32					
	33(a)					
	33(b)					
	34(a)					
	34(b)					
	35(a)					
	35(b)					
	36(a)					
	36(b)					
	36(c)					
(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 佔分	Marks 得分
31(a)	It needs _____ plastic stick(s) and _____ plastic ball(s). 最少需要_____枝膠棒和_____粒膠珠。	2	<input type="text"/>
31(b)	_____ cube(s) can be formed at most. 最多可以組成_____個正方體。	2	<input type="text"/>
31(c)		4	<input type="text"/>
32		4	<input type="text"/>

Go On To Next Page
轉下頁續答

Marks
佔分

Marks
得分

33(a)

4

33(b)

4

34(a)

The total weight of the chocolates is _____ kg.

巧克力共重 _____ kg。

2

34(b)

The shop will get \$ _____.

零食店將收得 \$ _____。

2

35(a)

4

Go On To Next Page

轉下頁續答

Marks
佔分

Marks
得分

35(b)

Because
因為

* agree / disagree (*Circle the answer)

* 同意 / 不同意 (*圈出答案)

4

36(a)

In _____ and _____, the sales of watches were
greater than 700 watches.

_____和_____手錶的銷量高於700隻。

2

36(b)

4

36(c)

The fraction was _____.

第一季度手錶的銷量佔去年上半年的_____。

2

END
完