

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One

中一入學前

Mathematics

數學

Mock Paper 2

模擬試卷(二)

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(小六)

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. Which of the following numbers is six million and three hundred thousand when corrected to nearest hundred thousand?

- A. 63 502 499
- B. 62 427 300
- C. 6 294 500
- D. 6 249 499

1. 下列哪一個數取近似值至十萬位是六百三十萬？

- A. 63 502 499
- B. 62 427 300
- C. 6 294 500
- D. 6 249 499

2. What is the 50th common multiple of 6 and 9?

- A. 18
- B. 54
- C. 900
- D. 2700

2. 6和9的第50個公倍數是多少？

- A. 18
- B. 54
- C. 900
- D. 2700

3.

$$102 \times 99 = ?$$

- A. $102 \times 100 - 1$
- B. $102 \times 100 - 99$
- C. $100 \times 99 + 2$
- D. $100 \times 99 + 2 \times 99$

4. 5 novels cost \$140. Yanny paid \$200 to buy 4 novels. How much was the change?

- A. \$193
- B. \$112
- C. \$88
- D. \$7

4. 5本小說售\$140，永恩付\$200購買4本小說，應找回多少？

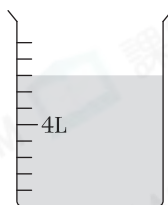
- A. \$193
- B. \$112
- C. \$88
- D. \$7

5. The weight of Wendy is $42\frac{3}{8}$ kg. Carman weighs $5\frac{1}{4}$ kg less than Wendy. How much do they weigh altogether?

- A. $37\frac{1}{8}$ kg
- B. $47\frac{5}{8}$ kg
- C. $79\frac{1}{2}$ kg
- D. 90kg

5. 穎希重 $42\frac{3}{8}$ kg，嘉敏比穎希輕 $5\frac{1}{4}$ kg，她們共重多少？

- A. $37\frac{1}{8}$ kg
- B. $47\frac{5}{8}$ kg
- C. $79\frac{1}{2}$ kg
- D. 90kg



6. In the above figure, how much water is there in the container?

- A. 8L
- B. 6.4L
- C. 4.6L
- D. 4.3L

6. 在上圖，容器中有水多少？

- A. 8L
- B. 6.4L
- C. 4.6L
- D. 4.3L

7. A roll of ribbon is 45m long. After using $\frac{1}{9}$ of it, the rest is cut into pieces of 5m long. How many pieces of ribbon can be cut out at most?

- A. 1
- B. 5
- C. 8
- D. 9

7. 一卷絲帶長45m，用去 $\frac{1}{9}$ 後，把餘下的絲帶每5m剪成一段，最多可剪成多少段？

- A. 1
- B. 5
- C. 8
- D. 9

8. The capacity of bottle A is 1.5L and 0.42L of water is needed to fill up this bottle. If bottle B contains 1.3L of water, what is the difference in the amounts of water between bottle A and B?

- A. 0.2L
- B. 0.22L
- C. 0.88L
- D. 1.08L

8. 瓶A的容量是1.5L，再注入0.42L水便把瓶A注滿。如果瓶B盛有1.3L水，那麼瓶A內的水和瓶B的相差多少？

- A. 0.2L
- B. 0.22L
- C. 0.88L
- D. 1.08L

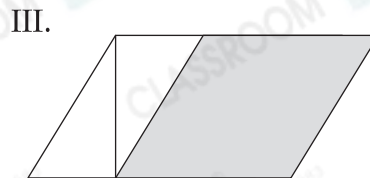
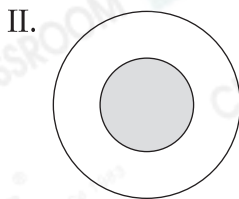
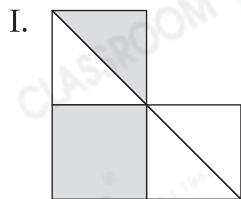
	Each towel	\$9.80
	每條	
	Buy 2 and get 1 extra free	
	買二送一	

9. My mother has \$30, how many towels can she buy at most?

- A. 3
- B. 4
- C. 5
- D. 6

9. 媽媽有\$30，她最多可購買毛巾多少條？

- A. 3
- B. 4
- C. 5
- D. 6



10. Which of the above figures has/have 50% of the shaded area?

- A. I only
- B. I and II only
- C. II and III only
- D. I, II and III

10. 上面哪個/些圖形的陰影部分佔了全圖的50%?

- A. 只有 I
- B. 只有 I 和 II
- C. 只有 II 和 III
- D. I、II 和 III

11. If $\frac{4}{*} = \frac{*}{20}$ and $\frac{4}{*}$ is a proper fraction, what numbers can * and * be?

- A. * = 2, * = 40
- B. * = 4, * = 20
- C. * = 5, * = 15
- D. * = 10, * = 8

11. 如果 $\frac{4}{*} = \frac{*}{20}$ ，且 $\frac{4}{*}$ 是真分數，那麼 * 和 * 可能是什麼數字？

- A. * = 2, * = 40
- B. * = 4, * = 20
- C. * = 5, * = 15
- D. * = 10, * = 8

12. How many '0.01' are there in the number $1\frac{1}{5}$?

- A. 0.012
- B. 0.12
- C. 12
- D. 120

12. 在 $1\frac{1}{5}$ 這個數中包含多少個「0.01」?

- A. 0.012
- B. 0.12
- C. 12
- D. 120

13. All factors of K are:

1, 3, 43, K

Which of the following is a multiple of K ?

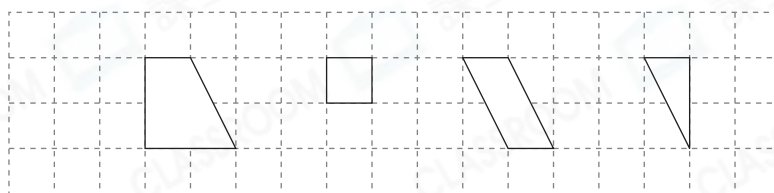
- A. 72
- B. 86
- C. 158
- D. 258

13. K 的所有因數是：

1、3、43、 K

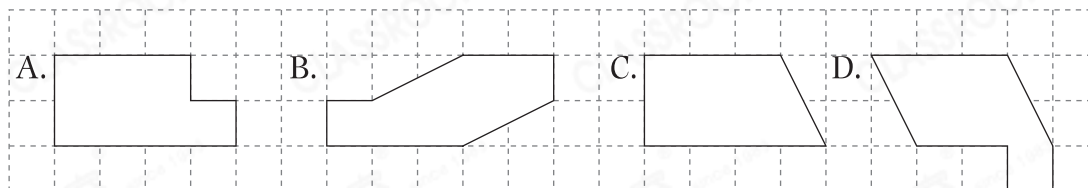
以下哪一個是 K 的倍數？

- A. 72
- B. 86
- C. 158
- D. 258



14. Which of the following figures cannot be formed by the above four shapes?

14. 下列哪一個圖形 不可能 由以上四個圖形拼砌出來？



15. Ling wants to cut a square into figures of the same size and same shape. Which of the following shapes she cannot obtain?

- A. square
- B. rectangle
- C. equilateral triangle
- D. isosceles right-angled triangle

15. 可玲 想把一個正方形分割成多個大小和形狀都相同的圖形。下列哪種圖形是她 不能 分割得到的？

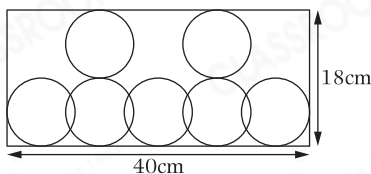
- A. 正方形
- B. 長方形
- C. 等邊三角形
- D. 等腰直角三角形

16. After using 18 plastic sticks and 14 plastic balls to make a cube, how many plastic sticks and plastic balls are left?

	<u>Number of plastic sticks</u>	<u>Number of plastic balls</u>
A.	3	4
B.	6	6
C.	10	6
D.	15	10

16. 利用 18 枝膠棒和 14 粒膠珠，砌成一個正方體後，剩下膠棒多少枝和膠珠多少粒？

	<u>膠棒數量</u>	<u>膠珠數量</u>
A.	3	4
B.	6	6
C.	10	6
D.	15	10



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

- A. 4.5cm
- B. 5cm
- C. 8cm
- D. 9cm

17. 上圖中，長方形內所有圓的大小都相同。每個圓的半徑是多少？

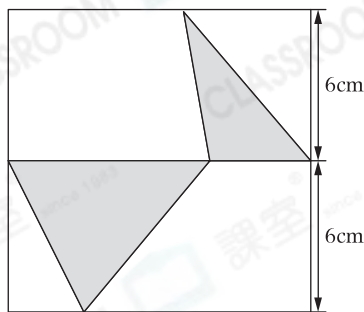
- A. 4.5cm
- B. 5cm
- C. 8cm
- D. 9cm

18. Rocky stands facing the southwest. Which direction is on his left?

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

18. 家樂面向西南方，他的左邊是哪一方？

- A. 東北
- B. 東南
- C. 西南
- D. 西北

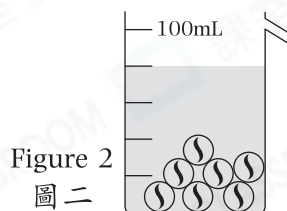
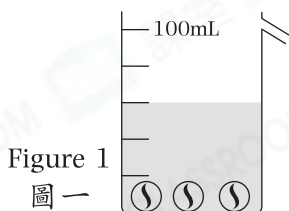


19. In the above square, what is the area of the shaded part?

- A. 18cm^2
- B. 36cm^2
- C. 72cm^2
- D. 144cm^2

19. 在上圖的正方形中，陰影部分的面積是多少？

- A. 18cm^2
- B. 36cm^2
- C. 72cm^2
- D. 144cm^2

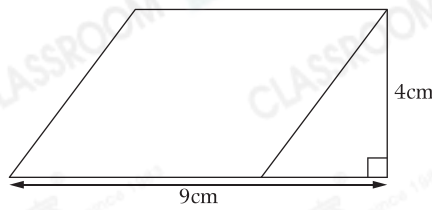


20. There were some water and 3 marbles in the container originally. After 4 marbles were added in, the water level went up. What was the total volume of these 7 marbles?

- A. 5cm^3
- B. 15cm^3
- C. 35cm^3
- D. 50cm^3

20. 上圖中，容器內原先盛載着一些水和3粒波子，加入4粒波子後，水位上升。這7粒波子的總體積是多少？

- A. 5cm^3
- B. 15cm^3
- C. 35cm^3
- D. 50cm^3



21. The above figure is a trapezium, which is formed by a parallelogram and a triangle. If the area of the parallelogram is 24cm^2 , what is the area of the trapezium?

- A. 6cm^2
- B. 12cm^2
- C. 30cm^2
- D. 60cm^2

21. 上圖是一個梯形，它是由一個平行四邊形和一個三角形所組成。如果平行四邊形的面積是 24cm^2 ，梯形的面積是多少？

- A. 6cm^2
- B. 12cm^2
- C. 30cm^2
- D. 60cm^2

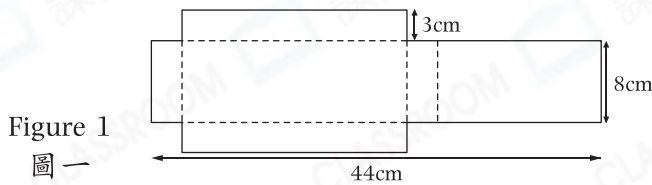


Figure 1
圖一

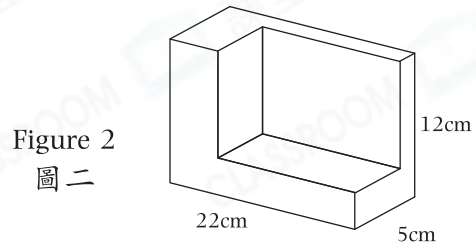


Figure 2
圖二

22. After the small cuboid formed by the net in Figure 1 is combined with the solid in Figure 2, a large cuboid of 22cm long, 5cm wide and 12cm high is formed. What is the volume of the solid in Figure 2?

- A. 864cm^3
- B. 456cm^3
- C. 336cm^3
- D. 264cm^3

22. 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、闊和高分別為 22cm、5cm 和 12cm 的大長方體。圖二的體積是多少？

- A. 864cm^3
- B. 456cm^3
- C. 336cm^3
- D. 264cm^3

Figure 1
圖一

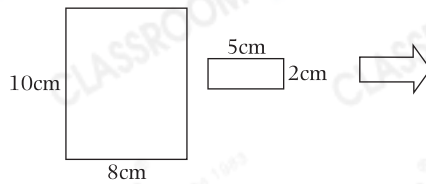
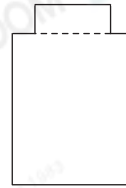


Figure 2
圖二



23. Figure 2 is formed by fitting the 2 rectangles shown in Figure 1. What is its perimeter?

- A. 50cm
- B. 44cm
- C. 40cm
- D. 20cm

23. 圖二是由圖一所示的兩個長方形拼砌而成，它的周界是多少？

- A. 50cm
- B. 44cm
- C. 40cm
- D. 20cm

24. $\frac{1}{6}$ of the volume is cut out from a cuboid of 12cm long, 10cm wide and 9cm high. What is the volume of the remaining part?

- A. 100cm^3
- B. 180cm^3
- C. 800cm^3
- D. 900cm^3

24. 把長、闊和高分別是12cm、10cm和9cm的長方體切去其體積的 $\frac{1}{6}$ ，餘下部分的體積是多少？

- A. 100cm^3
- B. 180cm^3
- C. 800cm^3
- D. 900cm^3

25. Two ropes are used to form two separate squares of areas 81cm^2 and 100cm^2 . What is the total length of the two ropes?

- A. 19cm
- B. 38cm
- C. 76cm
- D. 81cm

25. 繩子兩條，其中一條圍出面積是 81cm^2 的正方形，另一條圍出面積是 100cm^2 的正方形，兩條繩子共長多少？

- A. 19cm
- B. 38cm
- C. 76cm
- D. 81cm

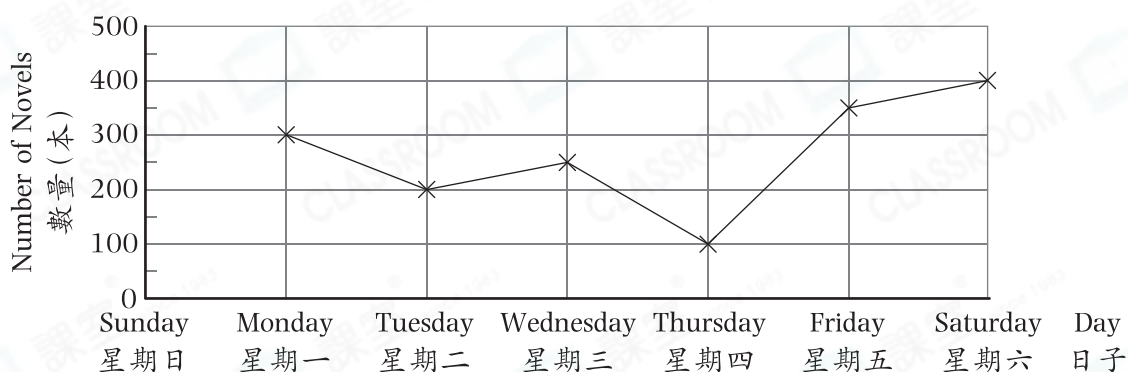
26. Full up a cup with water and pour the water into the cube tank with side 30cm. After pouring 12 cups of water, the water level reached $\frac{1}{5}$ of the height of the tank. What is the capacity of the cup?

- A. 5400mL
- B. 2250mL
- C. 450mL
- D. 150mL

26. 把杯子裝滿水，並把水倒入邊長為30cm的正方體水缸。倒了12杯水後，水位達至水缸高度的 $\frac{1}{5}$ 。杯子的容量是多少？

- A. 5400mL
- B. 2250mL
- C. 450mL
- D. 150mL

Sales of Novels Last Week
上星期小說的銷量



27. If the average sales of novels of the top two days was 450, how many novels were sold on Sunday?

- A. 500
- B. 450
- C. 400
- D. 350

27. 如果銷量最多的兩天，平均每天售出450本小說，那麼星期日售出小說多少本？

- A. 500
- B. 450
- C. 400
- D. 350

28. The temperature was 30°C on Monday, which was 4°C lower than that on Tuesday. The average temperature was 33°C from Wednesday to Friday. What was the average temperature of these five days?

- A. 32.6°C
- B. 31°C
- C. 26.6°C
- D. 25°C

28. 星期一的氣溫是 30°C ，比星期二的低 4°C ，星期三至星期五的平均氣溫是 33°C ，這五天的平均氣溫是多少？

- A. 32.6°C
- B. 31°C
- C. 26.6°C
- D. 25°C

29. A set of comic books costs \$168. Each bookmark costs \$ y . It costs \$32 to buy four bookmarks. Which of the following equations can be used to find the value of y ?

- A. $y + 32 = 168$
- B. $4y = 168$
- C. $4y = 32$
- D. $\frac{y}{4} = 32$

29. 每套漫畫書售 \$168，每張書籤售 \$ y 。買 4 張書籤須付 \$32。下列哪一道方程可找出 y 的值？

- A. $y + 32 = 168$
- B. $4y = 168$
- C. $4y = 32$
- D. $\frac{y}{4} = 32$

30. If $\frac{X}{3} - 2 = 10$, then $2X = ?$

- A. 4
- B. 24
- C. 36
- D. 72

30. 如果 $\frac{X}{3} - 2 = 10$ ，那麼 $2X = ?$

- A. 4
- B. 24
- C. 36
- D. 72

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。

	Monday 星期一	Tuesday 星期二	Wednesday 星期三	Thursday 星期四	Friday 星期五	Average 平均時間
Time of Ben (hour) 進仁的時間(小時)		0.3	0.2		0.7	0.44
Time of Ella (hour) 子恩的時間(小時)	0.1	0.8	0.2	0.4		

31. The above table shows the running times of two students last week.

- (a) If Ben spent an equal amount of time on running on Monday and Thursday. How long did he spend on running on Thursday? [4 marks]
- (b) Ella runs 0.9 hour at most every day. Could Ella run an average of 0.5 hour from Monday to Friday last week? Explain. [4 marks]

31. 上表是上星期兩名學生跑步的時間。

- (a) 如果進仁星期一和星期四的跑步時間相同，他星期四跑了多少小時？ [4分]
- (b) 子恩每天跑步的時間不會超過0.9小時。上星期一至星期五子恩平均每天跑步的時間會否達至0.5小時？試解釋。 [4分]



32. The above figure is formed by 4 squares of the same size. If one square of the same size is added, the figure becomes a symmetrical shape. Draw the required square and add the line of symmetry on the answer sheet. [2 marks]

32. 上圖是由四個大小相同的正方形組成。如果在這個圖案中，加上一個大小相同的正方形，它便成為一個軸對稱圖形。在答題紙上畫出所需的正方形，然後加上對稱軸。 [2分]

33. A company organized a picnic and provided 5 boxes of mineral water and each box contained 20 bottles.

- (a) Each bus has 54 seats. How many buses were needed at least for 181 staff members? (Give the answer only) [2 marks]
- (b) The staff members of the marketing department got 0.4 of all mineral water. The staff members of the accounts department got $\frac{7}{10}$ of a box of mineral water. What was the difference in the numbers of bottles of mineral water given between the two departments? [4 marks]

33. 某公司舉辦了一次旅行，公司提供5箱礦泉水，每箱有20瓶。

- (a) 每輛旅遊巴士有54個座位，最少需要多少輛旅遊巴士接載181名員工？(只須寫出答案) [2分]
- (b) 市場部員工分得全部礦泉水的0.4，會計部員工分得一箱的 $\frac{7}{10}$ 。兩個部門分得的礦泉水數量相差多少瓶？ [4分]

	Recitation Class 朗誦班	Rugby Class 橄欖球班
Course fee 全期學費	Special price 特價	\$3230
Number of periods 堂數	15	20
Duration of each period (hour) 每堂時間(小時)	$2\frac{1}{4}$	2
Fee for renting equipment (whole course) 器材租借費(全期)	—	\$970

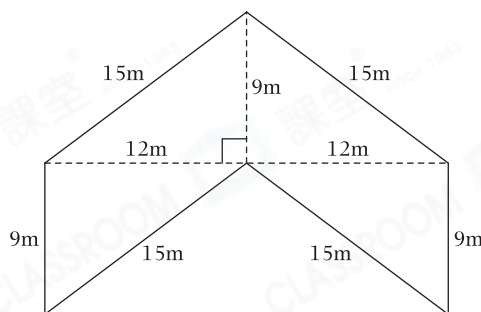
34. (a) If Lily enrolls for the rugby class and rents the equipment, what is the average fee per hour for the rugby class? (Give the answer only) [2 marks]

34. (a) 如果靈珊報讀橄欖球班並租借器材，橄欖球班平均每小時收費多少？(只須寫出答案) [2分]

34. (b) The course fee for the rugby class is \$150 more than 2 times of the course fee for recitation class. What is the course fee for the recitation class? (Use equation to solve the problem and show your working)

[4 marks]

34. (b) 橄欖球班的全期學費比朗誦班的2倍多\$150。朗誦班的全期學費是多少？(須用方程列式計算) [4分]



35. The above figure shows the plan of a flower bed in the park.

(a) What is the area of the flower bed? (Give the answer only) [2 marks]

(b) A guardrail is put up around this flower bed. The cost is \$35 per metre. What is the total cost? [4 marks]

(c) The park has a rectangular pool. The area of it is 30m^2 with each side measured in whole metres. Draw on the answer sheet one of the possible shapes of this pool. [2 marks]

35. 上圖是公園花園的平面圖。

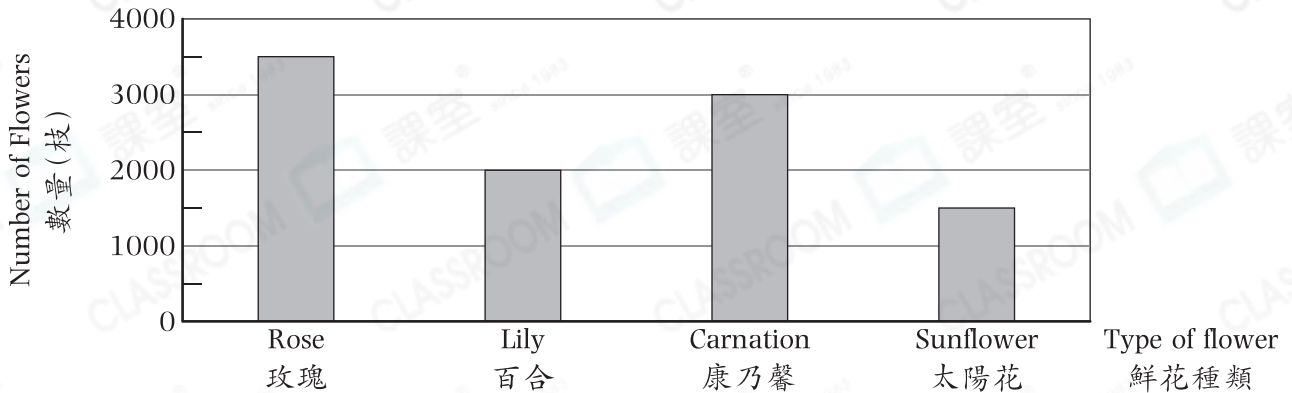
(a) 這個花園的面積是多少？(只須寫出答案) [2分]

(b) 在花園的周圍築起欄杆，費用是每米\$35，即共須付款多少？ [4分]

(c) 公園有一個長方形水池，面積是 30m^2 ，每邊的邊長都是以每米量度。在答題紙上，畫出公園水池其中一種可能的形狀。 [2分]

Sales of Flowers in a Flower Store Last Month

某花店上月鮮花的銷量



36. The above graph shows the sales of flowers in flower store last month.
- (a) The prices of each lily and each sunflower were the same. The sales amount of lilies was \$16000. How much was the sales amount of sunflowers last month? [4 marks]
- (b) What was the average sales of each type of flower last month? (Give the answer only) [2 marks]
- (c) The flower store also sells tulips this month. The original price of each tulip was \$10. Three extra tulips would be given for any purchase of a dozen of tulips. How much would each tulip cost on average? [4 marks]

36. 上圖顯示某花店上月鮮花的銷售量。

- (a) 一枝百合和一枝太陽花的售價相同。上月百合的銷售額是\$16000，那麼上月太陽花的銷售額是多少？ [4分]
- (b) 上月平均每種鮮花的銷量是多少？(只須寫出答案) [2分]
- (c) 該花店在本月亦有售賣鬱金香，每枝鬱金香的原價是\$10，如果購買一打，將可多得3枝。平均每枝鬱金香的售價將會是多少？ [4分]

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One Mathematics Mock Paper 2

中一入學前數學科模擬試卷(二)

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.	

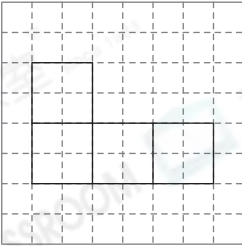
For Teacher's Use

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	19-26	27-28	29-30
	Marks 分數					
Section B 乙部	31(a)					
	31(b)					
	32					
	33(a)					
	33(b)					
	34(a)					
	34(b)					
	35(a)					
	35(b)					
	35(c)					
	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)		4	<input type="text"/>
31(b)	<p>Because 因為</p> <p>* could / could not (*circle the answer) * 會 / 不會 (*圈出答案)</p>	4	<input type="text"/>
32		2	<input type="text"/>

Go On To Next Page
轉下頁續答

		Marks 佔分	Marks 得分
33(a)	At least _____ buses were needed. 最少需要_____輛旅遊巴士。	2	<input type="text"/>
33(b)		4	<input type="text"/>
34(a)	The average fee per hour for the rugby class is \$ _____ . 橄欖球班平均每小時收費 \$ _____ 。	2	<input type="text"/>
34(b)		4	<input type="text"/>
35(a)	The area of the flower bed is _____ m ² . 這個花園的面積是_____ m ² 。	2	<input type="text"/>

Go On To Next Page
轉下頁續答

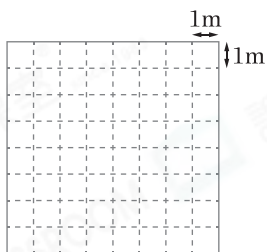
Marks
估分

Marks
得分

35(b)

4

35(c)



2

36(a)

4

36(b)

The average sales was _____ .
平均每種鮮花的銷量是_____枝。

2

36(c)

4

END
完