

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One

中一入學前

Mathematics

數學

Mock Paper 3

模擬試卷(三)

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

- A. 539 401
- B. 554 263
- C. 680 088
- D. 5 967 000

1. 下列哪一個數取近似值至十萬位後為六十萬？

- A. 539 401
- B. 554 263
- C. 680 088
- D. 5 967 000

2. Which of the following numbers lies between $\frac{7}{100}$ and 0.3?

- A. 0.2
- B. $\frac{8}{10}$
- C. 0.7
- D. 0.06

2. 下列哪一個數是在 $\frac{7}{100}$ 和 0.3 之間？

- A. 0.2
- B. $\frac{8}{10}$
- C. 0.7
- D. 0.06

3. Which of the following has the smallest value?

- A. 54×17.2
- B. 36×24.1
- C. 0.54×172
- D. 0.36×241

3. 下列哪一項的值最小？

- A. 54×17.2
- B. 36×24.1
- C. 0.54×172
- D. 0.36×241

4. A coach can carry 55 passengers. How many coaches are needed at least to carry 568 passengers?

- A. 9
- B. 10
- C. 11
- D. 12

4. 一輛旅遊巴士能容納55名乘客，568名乘客最少需要旅遊巴士多少輛？

- A. 9
- B. 10
- C. 11
- D. 12

5. $47\odot$ is a 3-digit number. When it is divided by 22, the remainder is 8. What number can \odot be?

- A. 9
- B. 6
- C. 4
- D. 0

5. $47\odot$ 是一個三位數。當它除以22，餘數是8。 \odot 可能是什麼數字？

- A. 9
- B. 6
- C. 4
- D. 0

6. The original price of a dictionary was \$78.8. Marie bought a dictionary and paid the bill with a \$100 note. The cashier told her that the dictionary was on sale and gave her \$31.5 change. How much was the dictionary cheaper?

- A. \$10.3
- B. \$11.3
- C. \$21.2
- D. \$30.6

6. 一本字典的原價是\$78.8。碧霞買一本字典，並以一張\$100鈔票付款。收銀員告訴她字典正以特價發售，因此找回\$31.5給她。字典的售價比原價便宜了多少？

- A. \$10.3
- B. \$11.3
- C. \$21.2
- D. \$30.6

7. Among the vehicles entering the gas station yesterday, $\frac{2}{5}$ were taxis and $\frac{3}{7}$ were trucks. The remaining were private cars. What fraction of all the vehicles was private cars?

- A. $\frac{3}{5}$
- B. $\frac{4}{7}$
- C. $\frac{6}{35}$
- D. $\frac{1}{35}$

7. 昨天進入油站的車輛中，的士佔 $\frac{2}{5}$ ，貨車佔 $\frac{3}{7}$ ，餘下的是私家車。私家車佔全部車輛的幾分之幾？

- A. $\frac{3}{5}$
- B. $\frac{4}{7}$
- C. $\frac{6}{35}$
- D. $\frac{1}{35}$

8. A toothbrush costs \$12. There is a special offer of 'Buy 3 Get 1 Free' today. My mother bought a dozen toothbrushes. How much did she save?

- A. \$12
- B. \$24
- C. \$36
- D. \$108

8. 一枝牙刷售 \$12，今天有買三送一的優惠。媽媽買了一打牙刷，她節省了多少？

- A. \$12
- B. \$24
- C. \$36
- D. \$108

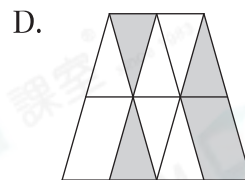
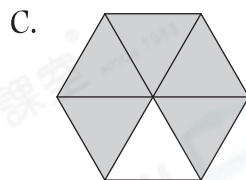
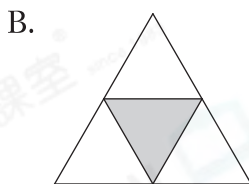
9. The first multiple of n is n . How many times of n is the sum of the first, the third and the fifth multiples of n ?

- A. 6
- B. 9
- C. 10
- D. 15

9. n 的第一個倍數是 n 。那麼 n 的第一、第三和第五個倍數之和是 n 的多少倍？

- A. 6
- B. 9
- C. 10
- D. 15

10. Which of the following figures has the largest fraction of the shaded part?



10. 下列哪一個圖形，它的陰影部分佔全圖的分數值最大？

11. Paul had savings of \$232 while his younger sister had \$112. Each of them used $\frac{3}{4}$ of their savings to buy a cake and $38\frac{1}{5}$ was left. How much did the cake cost?

- A. $219\frac{1}{5}$
- B. $219\frac{4}{5}$
- C. $248\frac{4}{5}$
- D. \$258

11. 家俊有儲蓄 \$232，妹妹有儲蓄 \$112，他們各拿出儲蓄的 $\frac{3}{4}$ ，一起購買一個蛋糕，還餘下 $38\frac{1}{5}$ 。這個蛋糕的售價是多少？

- A. $219\frac{1}{5}$
- B. $219\frac{4}{5}$
- C. $248\frac{4}{5}$
- D. \$258

12. There were 30 hats in a clothing store, 6 of them were straw hats, and $\frac{5}{12}$ of the remaining were woolen hats. What fraction of all hats was woolen hats?

- A. $\frac{1}{5}$
- B. $\frac{1}{3}$
- C. $\frac{1}{2}$
- D. $\frac{7}{12}$

12. 服裝店有 30 頂帽子，其中有 6 頂草帽，餘下的 $\frac{5}{12}$ 是毛呢帽。毛呢帽佔全部的幾分之幾？

- A. $\frac{1}{5}$
- B. $\frac{1}{3}$
- C. $\frac{1}{2}$
- D. $\frac{7}{12}$

13. Last week, Jack worked 4 days with 6.5 hours each day in a coffee shop. If the hourly wage in the coffee shop was \$50, how much did Jack earn last week?

- A. \$1300
- B. \$1100
- C. \$325
- D. \$200

13. 傑文上星期在咖啡店工作了4天，每天工作6.5小時。如果在咖啡店工作的時薪是\$50，傑文上星期獲得薪金多少？

- A. \$1300
- B. \$1100
- C. \$325
- D. \$200

14. There are 9 plastic sticks and 4 plastic balls. How many more plastic sticks and plastic balls are required to make a cube?

	<u>Plastic stick</u>	<u>Plastic ball</u>
A.	4	0
B.	3	4
C.	3	1
D.	4	2

14. 現有9枝膠棒及4粒膠珠。如要砌出一個正方體，要補上膠棒多少枝和膠珠多少粒？

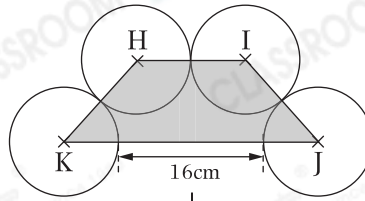
	<u>膠棒</u>	<u>膠珠</u>
A.	4	0
B.	3	4
C.	3	1
D.	4	2

15. Which of the following is the common property of parallelograms and squares?

- A. four sides are equal
- B. there are at most two right angles
- C. opposite sides are equal
- D. four angles are equal

15. 平行四邊形和正方形有以下哪一種共同性質？

- A. 四邊相等
- B. 最多有兩個直角
- C. 對邊相等
- D. 四角相等



16. In the above figure, H, I, J and K are the centres of four circles of the same size. The perimeter of the shaded part is 64cm. What is the diameter of each circle?

- A. 16cm
- B. 12cm
- C. 8cm
- D. 6cm

16. 上圖中，H、I、J和K是四個大小相同的圓的圓心，陰影部分的周界是64cm，每個圓的直徑是多少？

- A. 16cm
- B. 12cm
- C. 8cm
- D. 6cm

17. Kenny walked 200m east, and then walked 200m south. He wanted to go back to the starting point with the shortest route. In which direction should he walk?

- A. east
- B. south
- C. southeast
- D. northwest

17. 家文向東走了200m後，再向南走了200m。他想以最短的路線返回起點，應該往哪一個方向走？

- A. 東
- B. 南
- C. 東南
- D. 西北

18. Which of the following shapes cannot be formed by four right-angled triangles of the same size?

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

18. 四個大小相同的直角三角形不能拼砌成下列哪一個圖形？

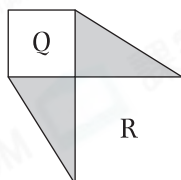
- A. 長方形
- B. 正方形
- C. 平行四邊形
- D. 圓形

19. $\frac{1}{5}$ of the volume is cut out from a cube of side 5cm. What is the volume of the remaining part?

- A. 25cm^3
- B. 75cm^3
- C. 100cm^3
- D. 125cm^3

19. 把邊長5cm的正方體切去其體積的 $\frac{1}{5}$ ，餘下部分的體積是多少？

- A. 25cm^3
- B. 75cm^3
- C. 100cm^3
- D. 125cm^3



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

- A. 40cm^2
- B. 80cm^2
- C. 89cm^2
- D. 160cm^2

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

- A. 40cm^2
- B. 80cm^2
- C. 89cm^2
- D. 160cm^2

21. There is a cuboid with base area 36cm^2 and height 50cm. It is cut five times and 6 small cuboids of the same size are formed. What is the volume of each small cuboid?

- A. 1800cm^3
- B. 360cm^3
- C. 300cm^3
- D. 110cm^3

21. 一個長方體的底面積是 36cm^2 ，高是50cm。把它切割5次，分成6個大小相同的小長方體，每個小長方體的體積是多少？

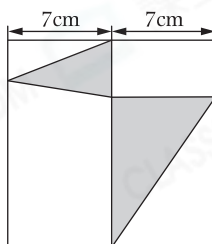
- A. 1800cm^3
- B. 360cm^3
- C. 300cm^3
- D. 110cm^3

22. Mrs Wong's hourly wage is \$45. She started working at 08:00 and earned \$180 yesterday. What time did she finish working?

- A. 12:00
- B. 11:45
- C. 09:45
- D. 09:00

22. 王太太的時薪是\$45。她昨天在08:00上班，共賺得\$180。她在什麼時候下班？

- A. 12:00
- B. 11:45
- C. 09:45
- D. 09:00



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

- A. $24\frac{1}{2} \text{ cm}^2$
- B. 49 cm^2
- C. 98 cm^2
- D. 196 cm^2

23. 在上圖的正方形中，陰影部分的面積是多少？

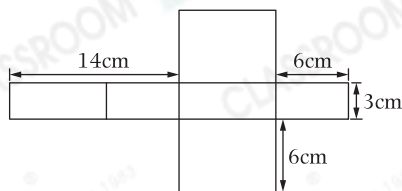
- A. $24\frac{1}{2} \text{ cm}^2$
- B. 49 cm^2
- C. 98 cm^2
- D. 196 cm^2

24. A rope of length 54cm is used to form a rectangle. If the length is 2 times the width, what is the area of this rectangle?

- A. 324 cm^2
- B. 162 cm^2
- C. 81 cm^2
- D. 72 cm^2

24. 用一條長54cm的繩子圍出一個長方形。如果長度是闊度的2倍，這個長方形的面積是多少？

- A. 324 cm^2
- B. 162 cm^2
- C. 81 cm^2
- D. 72 cm^2



25. The above figure is the net of a cuboid. What is the volume of the cuboid formed by the net?

- A. 252cm^3
- B. 216cm^3
- C. 144cm^3
- D. 108cm^3

25. 上圖是一個長方體的摺紙圖樣。這摺紙圖樣所摺出的長方體體積是多少？

- A. 252cm^3
- B. 216cm^3
- C. 144cm^3
- D. 108cm^3

Number of Students who is Awarded a Prize in a School

某校學生獲獎的人數

First prize
一等獎
Second prize
二等獎
Third prize
三等獎



Each ☺ stands for 10 students
每個 ☺ 代表10名學生

26. In a school, 120 students were awarded a prize. Jim put the number of students who was awarded a prize in a graph but recorded the number of first prize wrongly as shown above. How many ☺ should be added to the column of first prize?

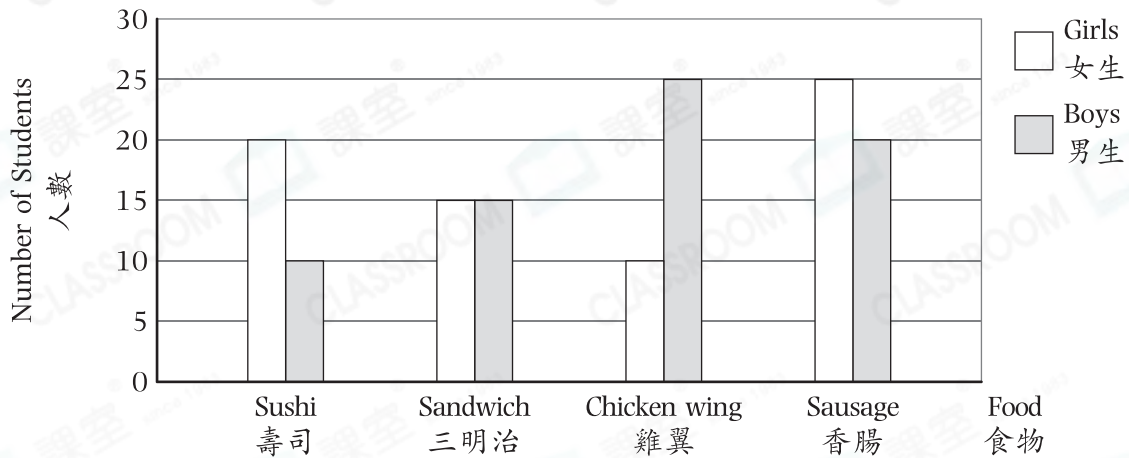
- A. 1
- B. 2
- C. 10
- D. 20

26. 某校有120名學生獲獎。健林把獲獎人數製成圖表時，卻把一等獎的人數畫錯了，如上圖所示。他應在一等獎一欄補上☺多少個？

- A. 1
- B. 2
- C. 10
- D. 20

Favourite Food of Primary 5 Students

五年級學生最喜愛的食物



27. By the one-student-one-vote scheme, students of Primary 5 voted for their favourite food. The result was given above. Given that 6 students were absent on the voting day, how many students altogether were there in Primary 5?

- A. 136
- B. 140
- C. 146
- D. 150

27. 5年級學生以一人一票的方式選出最喜愛的食物，結果如上。已知投票當天有6名學生缺席投票，5年級共有學生多少名？

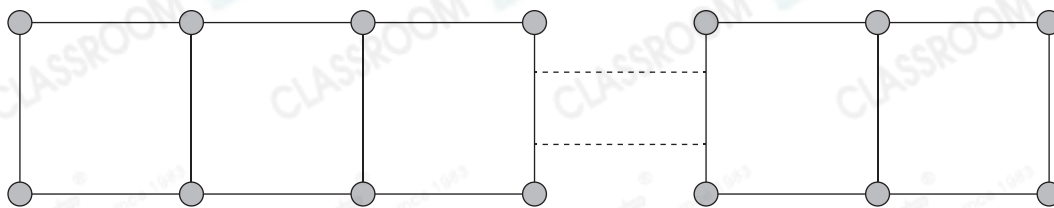
- A. 136
- B. 140
- C. 146
- D. 150

28. If $\frac{v}{5} - 4 = 8$, then $v + 7 = ?$

- A. 67
- B. 60
- C. 53
- D. 27

28. 如果 $\frac{v}{5} - 4 = 8$ ，那麼 $v + 7 = ?$

- A. 67
- B. 60
- C. 53
- D. 27



29. If Sam wants to form n squares by some sticks, as shown above. How many sticks does he need?

- A. $4n + 1$
- B. $4n - 1$
- C. $3n + 1$
- D. $3n - 1$

29. 若子森用一些棒拼出 n 個正方形，如上圖所示，他共需棒多少枝？

- A. $4n + 1$
- B. $4n - 1$
- C. $3n + 1$
- D. $3n - 1$

30. Abby had an amount of $\$x$ originally. She used $\frac{1}{5}$ of the amount to buy a wallet of $\$215$. Which of the following equations should be used to find the amount that Abby had originally?

- A. $\frac{x}{5} = 215$
- B. $5x = 215$
- C. $x - \frac{1}{5} = 215$
- D. $x \div \frac{1}{5} = 215$

30. 愛琳有款項 $\$x$ ，她用 $\frac{1}{5}$ 買了一個價值 $\$215$ 的錢包。下列哪一方程可用來找出愛琳原有的款項？

- A. $\frac{x}{5} = 215$
- B. $5x = 215$
- C. $x - \frac{1}{5} = 215$
- D. $x \div \frac{1}{5} = 215$

End of Section A

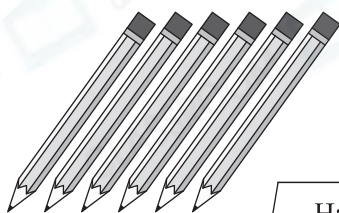
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SECTION B (40 marks)

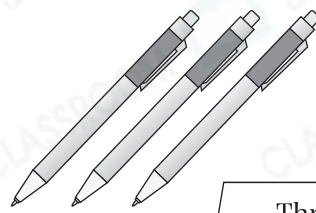
Working steps must be shown in answering questions in this section unless specified otherwise.

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。



Half dozen pencils
半打鉛筆
\$9.60



Three ball pens
3枝原子筆
\$17.40

31. (a) According to the above diagrams, how much did 2 dozen pencils cost? [4 marks]

(b) Vincent bought 27 ball pens. The number of ball pens he bought was 5 less than 4 times of that of pencils. How many pencils did Vincent buy? (Use equation to solve the problem and show your working) [4 marks]

31. (a) 根據上圖，兩打鉛筆的售價是多少？ [4分]

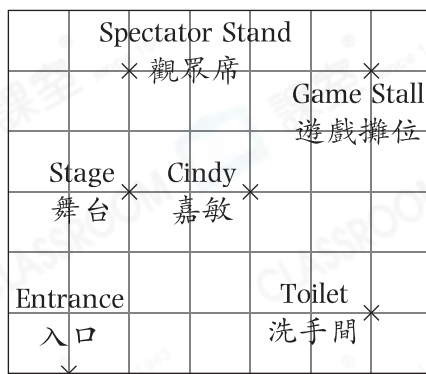
(b) 偉森買了27枝原子筆，買的原子筆的數量比鉛筆的4倍少5枝。偉森買了鉛筆多少枝？(須用方程列式計算) [4分]

32. There are 42 people in a tour. $\frac{2}{7}$ of them are children and $\frac{1}{4}$ of the children are under 9 years old. How many children under 9 years old are there? [4 marks]

32. 某旅遊團共有團員42人，其中小童佔 $\frac{2}{7}$ ，而小童中9歲以下的佔 $\frac{1}{4}$ 。9歲以下的小童有多少人？ [4分]

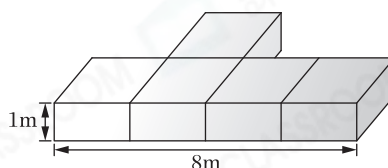
33. The following is the floor plan of Dance Carnival.

33. 下圖是舞蹈嘉年華的平面圖。



(a) The Toilet was in the northwest of the Game Stall. Cindy wanted to go to the Stage. To get the shortest route, in which direction should she walk? (Give the answer only) [2 marks]

(a) 洗手間在遊戲攤位的西北方。嘉敏想去舞台，她應往哪個方向走，路程才是最短的？(只須寫出答案) [2分]



(b) The stage was formed by 5 cuboids of the same size, as shown above. If the volume of the whole stage is 30m^3 , what is the width of each cuboid? [4 marks]

(b) 舞台由五個大小相同的長方體拼砌而成，如上圖所示。如果整個舞台的體積是 30m^3 ，每個長方體的闊是多少？ [4分]

(c) The admission fee for the Dance Carnival was \$100 per visitor. The number of visitors was 12368. What was the total admission fee when corrected to the nearest ten thousand dollars? (Give the answer only) [2 marks]

(c) 舞蹈嘉年華的入場費是每人 \$100，入場人數是 12368 人，把總入場費取近似值至萬位是多少？(只須寫出答案) [2分]

34. Mr Lee had a square ceramic tile of side 60cm. $\frac{1}{4}$ of ceramic tile was cut down, as shown below.



- (a) What was the length of the shorter side after the ceramic tile being cut? (Give the answer only) [2 marks]
- (b) As compared to the original ceramic tile, what was the decrease in its area after the ceramic tile being cut? [4 marks]

34. 李先生有一塊正方形瓷磚，邊長為 60cm。切割出 $\frac{1}{4}$ 後，如下圖所示。

- (a) 瓷磚切割後較短一邊的長度是多少？(只須寫出答案) [2分]
- (b) 瓷磚切割後，瓷磚的面積比原來的減少了多少？ [4分]

35. In a sports shop, a football and a basketball cost \$120 and \$175 respectively. The shop had sold 57 balls. $\frac{2}{3}$ of them were basketballs and the others were footballs.

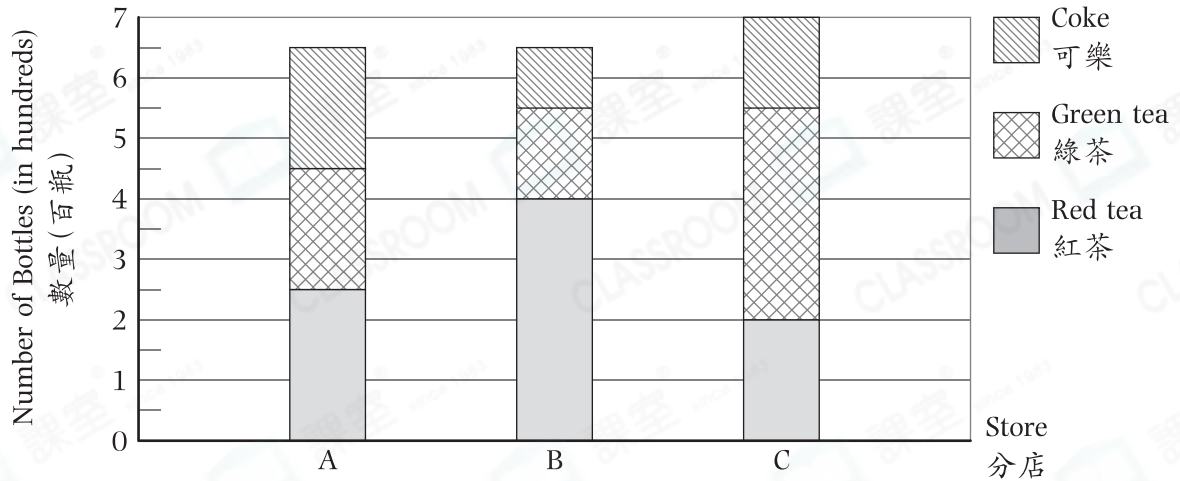
- (a) What fraction of the price of a basketball was that of a football? (Give the answer only) [2 marks]
- (b) What was the total income from selling footballs? [4 marks]

35. 某體育用品店，一個足球和一個籃球的售價分別是 \$120 和 \$175。該店賣出 57 個球，其中 $\frac{2}{3}$ 是籃球，其餘的是足球。

- (a) 每個足球的售價是每個籃球的幾分之幾？(只須寫出答案) [2分]
- (b) 售賣足球的總收入是多少？ [4分]

Sales of Different Kinds of Drinks Yesterday

昨天各種飲品的銷量



36. (a) As in the above graph, what was the difference between the sales of Green tea of store A and store B? (Give the answer only)

[1 mark]

36. (a) 如上圖，A店的綠茶銷量和B店的相差多少瓶？（只須寫出答案） [1分]

	Red tea 紅茶	Green tea 綠茶	Coke 可樂
Price (per bottle) 售價(每瓶)	\$8	\$7	\$6

- (b) According to the graph and the table, how much did store C earn by selling the above three drinks yesterday? [4 marks]

- (c) Miss Lee believed that in the sales of coke, the income of store C is \$200 less than that of store A. Do you agree with her? Explain.

[3 marks]

- (b) 根據統計圖及上表，C店昨天售出以上三種飲品的收入是多少？ [4分]

- (c) 李小姐認為在可樂的銷量中，C店的收入比A店的少\$200。你同意嗎？試解釋。 [3分]

HONG KONG ATTAINMENT TEST

香港學科測驗

Pre-Secondary One Mathematics Mock Paper 3

中一入學前數學科模擬試卷(三)

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	Algebra 代數
Section A 甲部	Item 題目	1-13	14-18	19-25	26-27	28-30
	Marks 分數					
Section B 乙部	31(a)					
	31(b)					
	32					
	33(a)					
	33(b)					
	33(c)					
	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)	4	<input type="text"/>
31(b)	4	<input type="text"/>
32	4	<input type="text"/>

Go On To Next Page
轉下頁續答

Marks
估分

Marks
得分

33(a)

She should walk in the direction _____.

她應往_____方走，路程才是最短的。

2

33(b)

4

33(c)

The total admission fee was about _____ ten thousand dollars.

總入場費約是_____萬元。

2

34(a)

The length of the shorter side was _____ cm.

較短一邊的長度是_____ cm。

2

34(b)

4

35(a)

The fraction was _____.

每個足球的售價是每個籃球的_____。

2

Go On To Next Page

轉下頁續答

Marks
佔分

Marks
得分

35(b)

4

36(a)

The difference was _____ bottles.
相差 _____ 瓶。

1

36(b)

4

36(c)

Because
因為

* agree / disagree (*Circle the answer)

* 同意 / 不同意 (*圈出答案)

3

END
完