

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。



CLASSROOM Pre-Secondary One Mathematics Mock Papers (P.5)

課室中一入學前數學科模擬試卷(小五)

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)

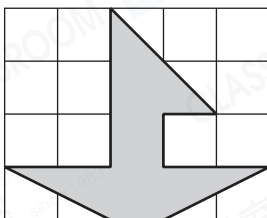
選出正確的答案。學生只須填上所選答案前的英文字母。

1. The number of trees in Country Park was three hundred and seventy thousand when corrected to the nearest ten thousand. Which of the following numbers can be the actual number of the trees in Country Park?

- A. 3 724 999
- B. 3 702 000
- C. 379 999
- D. 365 000

1. 郊野公園內的樹木數量，取近似值至萬位是三十七萬。以下哪一個數可能是郊野公園內樹木的實際數量？

- A. 3 724 999
- B. 3 702 000
- C. 379 999
- D. 365 000



2. The above figure is formed by 20 squares of the same size. By what fraction of the whole figure is the shaded part less than the white part?

- A. $\frac{7}{10}$
- B. $\frac{9}{20}$
- C. $\frac{2}{5}$
- D. $\frac{3}{10}$

2. 上圖由20個大小相同的正方形組成。陰影部分比白色部分少佔了全圖的幾分之幾？

- A. $\frac{7}{10}$
- B. $\frac{9}{20}$
- C. $\frac{2}{5}$
- D. $\frac{3}{10}$

3. There are four dozen buns in one baking tray. Each bun costs \$16. If Miss Kaung sells all the buns in 31 baking trays, how much should she get in total?

- A. \$496
- B. \$1984
- C. \$5952
- D. \$23 808

3. 一個烤盤裝有四打麵包。每個麵包售\$16。如果沉小姐售出31個烤盤上的所有麵包，共收得多少？

- A. \$496
- B. \$1984
- C. \$5952
- D. \$23 808

4. The serial number of a table is a common multiple of 4 and 10. It is also a common factor of 40 and 60. Which of the following numbers may be the serial number of that table?

- A. 60
- B. 40
- C. 20
- D. 10

4. 某張桌子的編號是4和10的公倍數，也是40和60的公因數。以下哪個數可能是該桌子的編號？

- A. 60
- B. 40
- C. 20
- D. 10

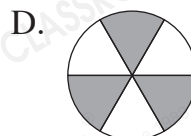
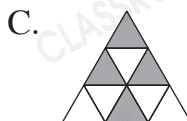
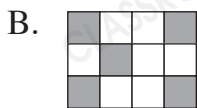
5. After John filled up the remote control car with $3\frac{4}{5}$ L of fuel, $2\frac{1}{4}$ L of fuel was left. How much fuel did John have originally?

- A. $6\frac{1}{20}$ L
- B. 6L
- C. $5\frac{1}{5}$ L
- D. $5\frac{1}{20}$ L

5. 俊輝給遙控汽車添加 $3\frac{4}{5}$ L燃料後，還餘下 $2\frac{1}{4}$ L燃料。俊輝原有燃料多少？

- A. $6\frac{1}{20}$ L
- B. 6L
- C. $5\frac{1}{5}$ L
- D. $5\frac{1}{20}$ L

6. Which of the following figures has the smallest fraction of the shaded part?



6. 下列哪一個圖形，它的陰影部分佔全圖的分數值最小？

Set Meal 套餐	A	B	C
Price 售價	$\$26\frac{4}{5}$	$\$19\frac{3}{10}$	$\$21\frac{1}{2}$
Add $\$6\frac{3}{5}$ to any purchase of a set meal to get a toy. 購買任何一份套餐，加 $\$6\frac{3}{5}$ 即可換購一件玩具。			

7. If Kelly got a toy, how much did she pay at least?

- A. $\$19\frac{3}{10}$
- B. $\$25\frac{9}{10}$
- C. $\$28\frac{1}{5}$
- D. $\$33\frac{2}{5}$

7. 若凱莉換購了一件玩具，她最少已付款多少？

- A. $\$19\frac{3}{10}$
- B. $\$25\frac{9}{10}$
- C. $\$28\frac{1}{5}$
- D. $\$33\frac{2}{5}$

8. If $E \times 38 = F$, which of the following is **not correct**?

- A. F must be a common multiple of E and 38.
- B. F is a multiple of 38.
- C. E is a factor of F .
- D. F must be the L.C.M. of E and 38.

8. 如果 $E \times 38 = F$ ，下列哪一項是**不正確**的？

- A. F 一定是 E 和38的公倍數。
- B. F 是38的倍數。
- C. E 是 F 的因數。
- D. F 一定是 E 和38的L.C.M.。

9. My mother bought a watermelon and ate $\frac{1}{5}$ of it. My father ate $\frac{7}{10}$ of half of it. My brother ate half of $\frac{2}{5}$ of it. My sister ate $\frac{2}{5}$ of $\frac{1}{4}$ of it. Who ate the same amount of watermelon?

- A. my father and mother
- B. my father and sister
- C. my mother and brother
- D. my sister and brother

9. 媽媽買了一個西瓜，她吃了整個西瓜的 $\frac{1}{5}$ ，爸爸吃了半個西瓜的 $\frac{7}{10}$ ，弟弟吃了 $\frac{2}{5}$ 個西瓜的一半，姊姊吃了 $\frac{1}{4}$ 個西瓜的 $\frac{2}{5}$ 。誰吃去西瓜的分量相同？

- A. 爸爸和媽媽
- B. 爸爸和姊姊
- C. 媽媽和弟弟
- D. 姊姊和弟弟

10. If $2\frac{1}{14} - \frac{\Delta}{7} = 1$, which of the following is equal to 14?

- A. $29 - 2 \times \Delta$
- B. $\Delta + 29$
- C. $2 \times \Delta - 29$
- D. $2 \times \Delta + 1$

10. 如果 $2\frac{1}{14} - \frac{\Delta}{7} = 1$ ，那麼下列哪一項等於 14？

- A. $29 - 2 \times \Delta$
- B. $\Delta + 29$
- C. $2 \times \Delta - 29$
- D. $2 \times \Delta + 1$



Composite number
合成數



Prime number
質數

11. A 3-digit code is composed of a 1-digit composite number and a 2-digit prime number. Which of the following can be the possible code?

- A. 223
- B. 350
- C. 617
- D. 628

11. 一個三位數的密碼，是由一個一位合成數和一個兩位質數合併而成。以下哪一個可能是這個密碼？

- A. 223
- B. 350
- C. 617
- D. 628

12. After an iron rod of $2\frac{1}{2}$ m long is heated, its length is increased by $\frac{2}{25}$. How much has the length of the iron rod increased by?

- A. $\frac{1}{5}$ m
- B. $1\frac{3}{5}$ m
- C. $2\frac{3}{10}$ m
- D. $2\frac{29}{50}$ m

12. 一枝長 $2\frac{1}{2}$ m 的鐵棒受熱後，長度增加了 $\frac{2}{25}$ ，鐵棒增長了多少？

- A. $\frac{1}{5}$ m
- B. $1\frac{3}{5}$ m
- C. $2\frac{3}{10}$ m
- D. $2\frac{29}{50}$ m

13. Nick packed a box of pears into bags of 12 each and there were 39 bags. If he repacked them into bags of 8 each, how many pears would be left?

- A. 59
- B. 58
- C. 4
- D. 3

13. 文傑把一箱梨每 12 個裝成一袋，剛好裝成 39 袋。如果改為每 8 個梨裝成一袋，重新包裝後，餘下梨多少個？

- A. 59
- B. 58
- C. 4
- D. 3

14. There were $235\frac{1}{2}$ kg of nuts in a store and $\frac{2}{5}$ of them were almonds. If $\frac{1}{3}$ of almonds were sold, how many kilograms of almonds were sold?

- A. $94\frac{1}{5}$ kg
- B. $78\frac{1}{2}$ kg
- C. $52\frac{1}{5}$ kg
- D. $31\frac{2}{5}$ kg

14. 雜貨店內有 $235\frac{1}{2}$ kg 果仁，其中 $\frac{2}{5}$ 是杏仁。如果售出 $\frac{1}{3}$ 杏仁，即售出杏仁多少？

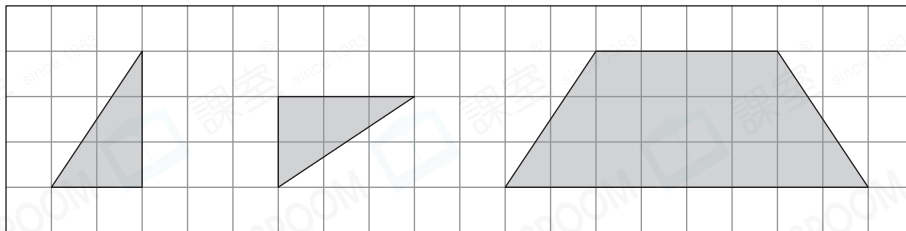
- A. $94\frac{1}{5}$ kg
- B. $78\frac{1}{2}$ kg
- C. $52\frac{1}{5}$ kg
- D. $31\frac{2}{5}$ kg

15. The weight of a bracelet is 14.7g. A shop assistant recorded the weight as 17.4g by mistake. What is the difference in value between the two '7's?

- A. 0.3
- B. 6.3
- C. 63
- D. 69.3

15. 一隻手鐲的重量是14.7g。店員卻誤記錄成17.4g，兩個「7」的數值相差多少？

- A. 0.3
- B. 6.3
- C. 63
- D. 69.3



16. Which of the following shapes can be formed by using all the above figures?

- I. triangle
- II. rhombus
- III. parallelogram

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

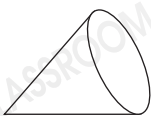
16. 用以上所有圖形，可以拼出以下哪些圖形？

- I. 三角形
- II. 菱形
- III. 平行四邊形

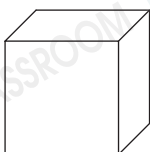
- A. 只有I及II
- B. 只有I及III
- C. 只有II及III
- D. I、II及III

17. Which of the following solids has 3 faces?

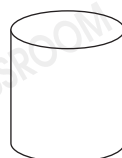
A.



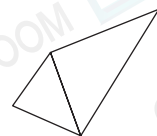
B.

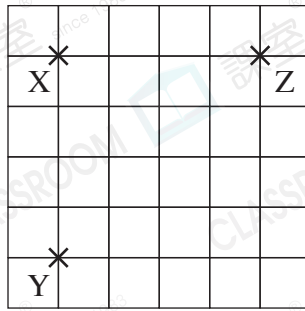


C.



D.



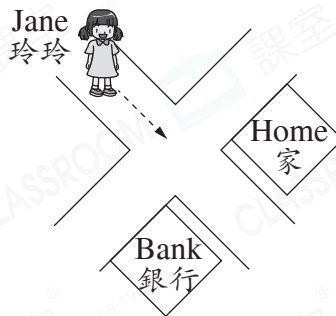


18. In the above figure, Jackson went northwest from Y to X. When he arrived at X, in which direction is he from Z?

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

18. 上圖中，志軍由Y向西北方出發往X，到達X時，他在Z的哪一個方向？

- A. 東南
- B. 東北
- C. 西南
- D. 西北



19. In the above figure, Jane was walking in the southwest along the footpath. When she arrived at the junction, in which direction should she go in order to reach home?

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

19. 上圖中，玲玲正沿路向西南方走，當她到達分岔路口時，她應向什麼方向走才可以到達家？

- A. 東南
- B. 東北
- C. 西南
- D. 西北

20. Which of the following must be the common property of rectangles and rhombuses?

- A. four angles are equal
- B. four sides are equal
- C. there is at least a right angle
- D. opposite sides are parallel

20. 下列哪一項必定是長方形和菱形的共同特性？

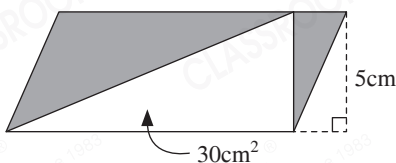
- A. 四個角相等
- B. 四邊長度相等
- C. 最少有一個直角
- D. 對邊平行

21. Mr Lee parked his car in the car park at 7:25 p.m. and drove away at 20:10 on the same day. How long did he park his car in the car park?

- A. 15 minutes
- B. 25 minutes
- C. 35 minutes
- D. 45 minutes

21. 李先生在7:25 p.m.把車駛進停車場，然後在同日20:10駕車離開。他共泊車多長時間？

- A. 15分鐘
- B. 25分鐘
- C. 35分鐘
- D. 45分鐘

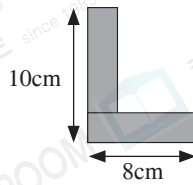


22. The above figure is a parallelogram. The area of the white part is 30cm^2 . What is the area of the shaded part?

- A. 15cm^2
- B. 30cm^2
- C. 50cm^2
- D. 60cm^2

22. 上圖是一個平行四邊形，白色部分的面積是 30cm^2 ，陰影部分的面積是多少？

- A. 15cm^2
- B. 30cm^2
- C. 50cm^2
- D. 60cm^2



23. The L-shaped figure above is formed by two rectangles of the same size. What is the area of the figure?

- A. 24cm^2
- B. 32cm^2
- C. 40cm^2
- D. 52cm^2

23. 上圖的L形圖案由兩個大小相同的長方形組成。這個圖案的面積是多少？

- A. 24cm^2
- B. 32cm^2
- C. 40cm^2
- D. 52cm^2

24. Joyce cut out the largest square from a piece of rectangular card with area 60cm^2 . The area of the square is $\frac{3}{5}$ of the area of the card. What is the perimeter of the original card?

- A. 6cm
- B. 16cm
- C. 20cm
- D. 32cm

24. 祖兒從一張面積 60cm^2 的長方形卡紙剪出一個最大的正方形，正方形的面積是卡紙面積的 $\frac{3}{5}$ 。原來卡紙的周界是多少？

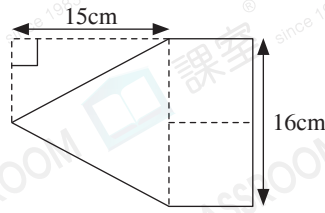
- A. 6cm
- B. 16cm
- C. 20cm
- D. 32cm

25. If both the length and the width of a rectangle are increased by 12cm, how much will its perimeter increase by?

- A. 12cm
- B. 24cm
- C. 48cm
- D. 86cm

25. 如果一個長方形的長和闊都增加 12cm，它的周界將增加多少？

- A. 12cm
- B. 24cm
- C. 48cm
- D. 86cm



26. The above figure is formed by a triangle and two squares of the same size. What is the area of the figure?

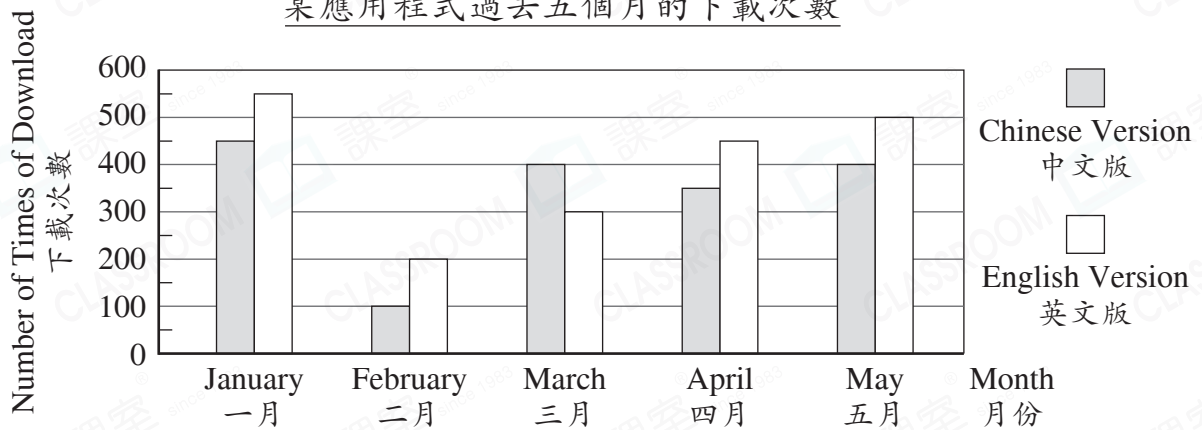
- A. 376cm^2
- B. 248cm^2
- C. 184cm^2
- D. 120cm^2

26. 上圖由一個三角形和兩個大小相同的正方形組成，這個圖形的面積是多少？

- A. 376cm^2
- B. 248cm^2
- C. 184cm^2
- D. 120cm^2

Number of Times of Download of an App in the Past Five Months

某應用程式過去五個月的下載次數



27. According to the above graph, in which month the total number of times of download was exactly 3 times that in February?

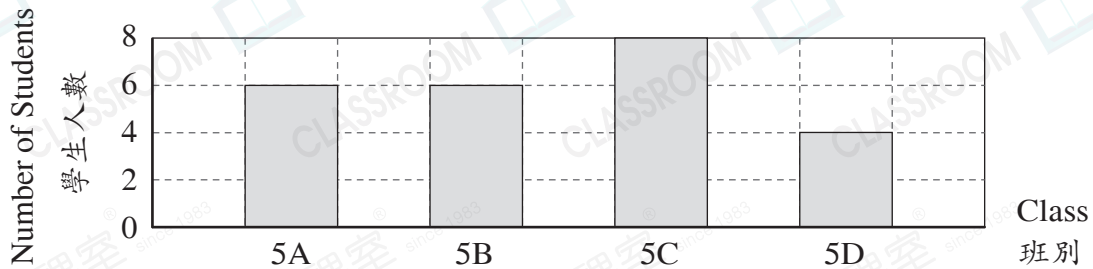
- A. January
- B. March
- C. April
- D. May

27. 根據上圖，哪一個月該應用程式的總下載次數剛好是二月的3倍？

- A. 一月
- B. 三月
- C. 四月
- D. 五月

Number of Primary 5 Students Getting an Improvement Award

五年級各班獲得進步獎的人數



28. What fraction of students getting the Improvement Award in Primary 5 was that in Class 5A?

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

28. 5A班獲得進步獎的學生佔五年級獲得進步獎的學生的幾分之幾？

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

29. Lucy had $\$(Y - 21)$ originally. She saves $\$5$ every day. After a week, how much will she have?

- A. $\$(Y - 3)$
- B. $\$(Y - 16)$
- C. $\$(Y + 4)$
- D. $\$(Y + 14)$

29. 美倩原有 $\$(Y - 21)$ ，她每天儲蓄 $\$5$ 。一個星期後，她有款項多少？

- A. $\$(Y - 3)$
- B. $\$(Y - 16)$
- C. $\$(Y + 4)$
- D. $\$(Y + 14)$

30. If $3t = 39$, then $15 - t = ?$

- A. 1
- B. 2
- C. 13
- D. 28

30. 如果 $3t = 39$ ，那麼 $15 - t = ?$

- A. 1
- B. 2
- C. 13
- D. 28

End of Section A

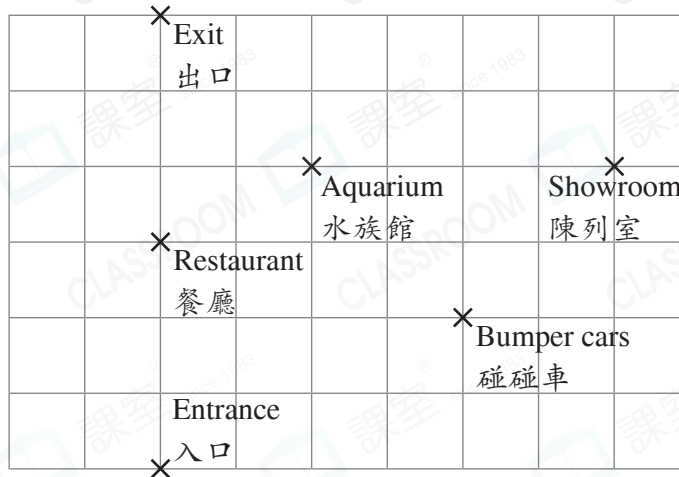
甲部完

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. The above is the floor plan of Children's World.

- (a) The Entrance is in the northeast of the Restaurant. What is the direction of the Showroom from the Aquarium? (Give the answer only) [2 marks]
- (b) There are 105 chairs in the Restaurant, $\frac{1}{3}$ of them are plastic chairs and $\frac{2}{5}$ of plastic chairs are red. How many plastic chairs are red? [4 marks]
- (c) Rod bought two hamburgers with the price \$22.8 each at the Restaurant. He paid with a \$50 note. What was the change? (Give the answer only) [2 marks]

31. 上圖是兒童天地的平面圖。

- (a) 入口在餐廳的東北方，陳列室在水族館的哪一方？(只須寫出答案) [2分]
- (b) 餐廳裏有105張椅子， $\frac{1}{3}$ 是膠椅，其中 $\frac{2}{5}$ 的膠椅是紅色的。紅色的膠椅有多少張？ [4分]
- (c) 浩文在餐廳買了兩個漢堡，每個漢堡售\$22.8。他付了一張\$50的紙幣，應找回多少？(只須寫出答案) [2分]

Four sunflowers
4枝向日葵
\$56

Eleven roses
11枝玫瑰
\$132

32. (a) According to the above figures, what is the difference between the average price of a sunflower and that of a rose? [4 marks]

(b) There were several roses in the flower shop originally and $\frac{1}{3}$ of them were sold in the morning. If 200 roses were sold in the morning, how many roses were there in the shop originally? (Use equation to solve the problem and show your working) [4 marks]

32. (a) 根據上圖，比較一枝向日葵和一枝玫瑰，它們的平均售價相差多少？ [4分]

(b) 花店原有一些玫瑰，上午售出了 $\frac{1}{3}$ 。如果上午售出200枝玫瑰。花店原有玫瑰多少枝？(須用方程列式計算，並展示步驟) [4分]

33. In a hotel, the rate for a single room and a twin room are \$750 and \$900 respectively. Today, 288 rooms are rented in the hotel and $\frac{4}{9}$ of them are single rooms.

(a) What fraction of the rate for a twin room is the rate for a single room? (Give the answer only) [2 marks]

(b) What is the total rate of renting the single room today? [4 marks]

33. 某酒店的單人房和雙人房的收費分別是每間\$750和\$900。該酒店今日共租出288間房，其中 $\frac{4}{9}$ 是單人房。

(a) 每間單人房的收費是每間雙人房的幾分之幾？(只須寫出答案) [2分]

(b) 今天租出單人房共收得款項多少？ [4分]

34. A candy shop bought 420kg of candies. $\frac{1}{3}$ of the candies were lemon flavour and $\frac{2}{5}$ were mango flavour. The rest were apple flavour.

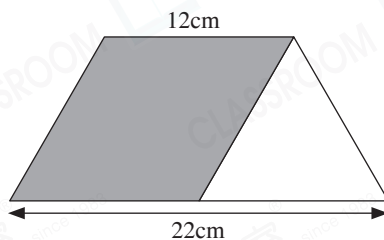
(a) What fraction of the candies were apple flavour? [4 marks]

(b) Later, the shopkeeper found that the mango flavour candies went bad and had to be destroyed. If the mango flavour candies cost \$ p per kilogram, how much did the candy shop lose? (Give the answer only and express the answer in terms of p) [2 marks]

34. 某糖果店購入 420kg 糖果，其中 $\frac{1}{3}$ 是檸檬味， $\frac{2}{5}$ 是芒果味，餘下的是蘋果味。

(a) 蘋果味糖果佔全部糖果的幾分之幾？ [4分]

(b) 糖果店店主發現芒果味糖果變質了，要把芒果味糖果銷毀。如果芒果味糖果的成本是每公斤 \$ p ，糖果店損失款項多少？(只須寫出答案，答案以 p 表示) [2分]



35. The above figure is a trapezium which is formed by a parallelogram and a triangle. The area of the white part is 55cm^2 .

(a) What is the height of the trapezium? (Give the answer only) [2 marks]

(b) What is the area of the trapezium? [4 marks]

35. 上圖是由一個平行四邊形和一個三角形組成的梯形，白色部分的面積是 55cm^2 。

(a) 梯形的高是多少？(只須寫出答案) [2分]

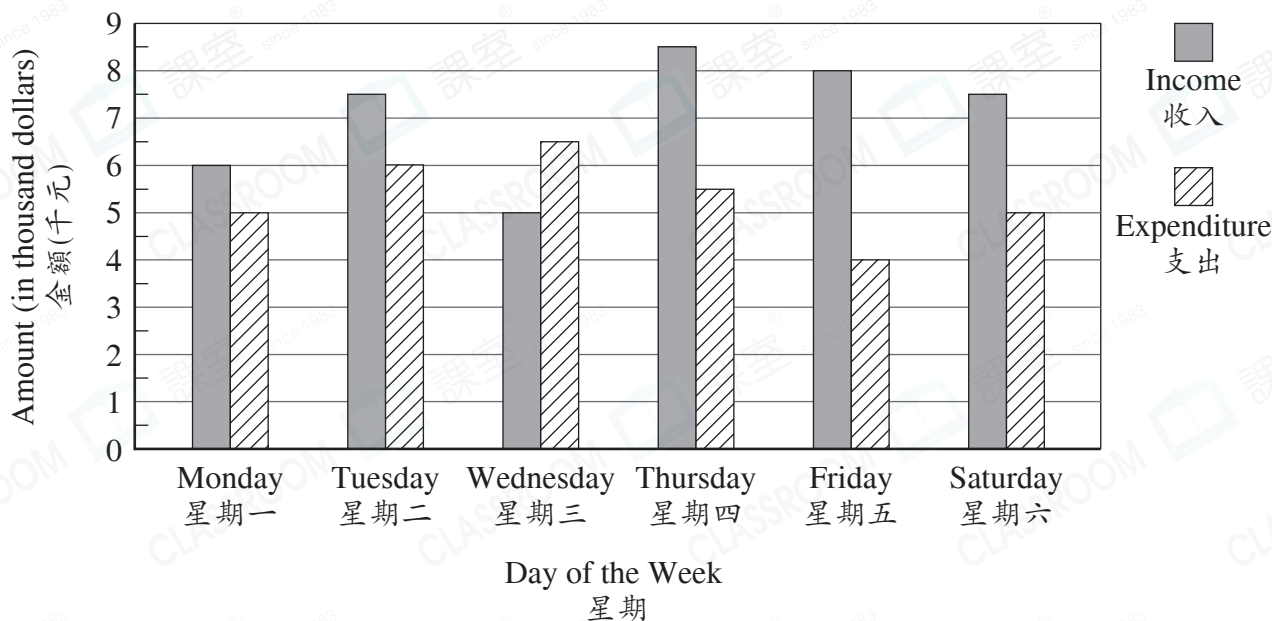
(b) 梯形的面積是多少？ [4分]

36. The graph below shows the income and expenditure of a snack shop in the past six days.

36. 下圖顯示了小食店過去六天的收入和支出。

Income and Expenditure of a Snack Shop in the Past Six Days

小食店過去六天的收入和支出



(a) Was the expenditure on Thursday more or less than that on Friday? What was the difference? (Give the answer only) [2 marks]

(a) 星期四的支出比星期五的多還是少？相差多少？（只須寫出答案） [2分]

(b) From Monday to Wednesday, can the snack shop make a profit? Explain. [4 marks]

(b) 由星期一至星期三，小食店是否能獲利？試解釋。 [4分]