

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。



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. $\frac{R}{10}$ lies between $\frac{1}{3}$ and $\frac{5}{6}$. Which of the following is the possible value of R ?

- A. 9
- B. 7
- C. 3
- D. 1

1. $\frac{R}{10}$ 的值在 $\frac{1}{3}$ 和 $\frac{5}{6}$ 之間。下列哪一個數可能是 R 的值？

- A. 9
- B. 7
- C. 3
- D. 1

2. $12 \times 199 = ?$

- A. $10 \times 199 + 2$
- B. $10 \times 200 + 12$
- C. $12 \times 200 - 2$
- D. $12 \times 200 - 12$

3. Which of the following groups of numbers has the product as their L.C.M.?

- A. 6, 14
- B. 8, 12
- C. 9, 10
- D. 15, 25

3. 下列哪一組數的積就是它們的 L.C.M. ?

- A. 6、14
- B. 8、12
- C. 9、10
- D. 15、25

4. The distance travelled by a train is 450 000m when corrected to the nearest ten thousand and 455 000m when corrected to the nearest thousand. Which of the following could be the possible distance travelled by this train?

- A. 454 300m
- B. 454 600m
- C. 455 300m
- D. 455 600m

4. 某火車行駛的路程取近似值至萬位後為450 000m，取近似值至千位後為455 000m。下列哪一項可能是該火車行駛的路程？

- A. 454 300m
- B. 454 600m
- C. 455 300m
- D. 455 600m

5. What is the sum of the smallest and the greatest multiples of 24 between 70 and 200?

- A. 120
- B. 192
- C. 240
- D. 264

5. 在70至200之間，24的最小和最大的倍數之和是多少？

- A. 120
- B. 192
- C. 240
- D. 264

6. My elder brother has \$142.5 and my younger brother has \$48.7. They are planning to buy a toy car together but they still need \$72.8. What is the price of the toy car?

- A. \$264
- B. \$198.4
- C. \$191.2
- D. \$135.8

6. 哥哥有\$142.5，弟弟有\$48.7，二人打算合資買一部玩具車，但還欠\$72.8，玩具車的售價是多少？

- A. \$264
- B. \$198.4
- C. \$191.2
- D. \$135.8

7. What is the result of multiplying the largest 3-digit even number and the smallest 2-digit number?

- A. 9890
- B. 9908
- C. 9980
- D. 9990

7. 最大的三位偶數與最小的兩位數相乘的結果是多少？

- A. 9890
- B. 9908
- C. 9980
- D. 9990

8. Which of the following has the largest value?

- A. 219×0.14
- B. 21.9×14
- C. 185×0.33
- D. 18.5×33

8. 下列哪一項的值最大？

- A. 219×0.14
- B. 21.9×14
- C. 185×0.33
- D. 18.5×33

Charge for Parking
泊車收費

Every 1 hour
每1小時

\$18.5

(1-hour rate is charged for parking time less than 1 hour)
(不足1小時亦以1小時收費計算)

9. Mr Lee parked his car in the car park for 3.8 hours. How much should he pay?

- A. \$42
- B. \$44
- C. \$74
- D. \$82

9. 李先生把車停泊在停車場3.8小時，他須付款多少？

- A. \$42
- B. \$44
- C. \$74
- D. \$82

10. The machine took 14 minutes to cut 224 pineapples. If 352 pineapples were cut at the same speed, how many minutes did it take?

- A. 24 minutes
- B. 23 minutes
- C. 22 minutes
- D. 8 minutes

10. 機器用了14分鐘切開224個菠蘿。如果以相同的速度切開352個菠蘿，要用多少分鐘？

- A. 24分鐘
- B. 23分鐘
- C. 22分鐘
- D. 8分鐘

11. There were originally 20 apples in the box. Betty gave $\frac{2}{5}$ of the apples to grandma and ate 3 apples. What fraction of the apples was left?

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

11. 箱子內原有蘋果20個，佩怡把 $\frac{2}{5}$ 送給祖母，自己吃去3個蘋果，餘下幾分之幾？

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

12. The suit jacket costs \$333.5. It is more expensive than the pair of suit trousers by \$158.6. How much should be paid for a set of suit with jacket and trousers?

- A. \$174.9
- B. \$508.4
- C. \$650.7
- D. \$825.6

12. 一件西裝外套售\$333.5，比一條西裝褲貴\$158.6。如果買一套西裝，應付款多少？

- A. \$174.9
- B. \$508.4
- C. \$650.7
- D. \$825.6

13. The weight of soda with a bottle is 530g. When half of the soda in the bottle is drunk, the weight of the remaining soda with bottle is 305g. What is the weight of the bottle?

- A. 450g
- B. 225g
- C. 80g
- D. 40g

13. 一瓶汽水連瓶子共重530g，喝去一半汽水後，剩下的汽水連瓶子重305g，瓶子的重量是多少？

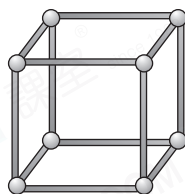
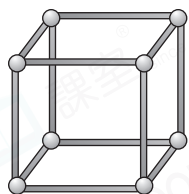
- A. 450g
- B. 225g
- C. 80g
- D. 40g

14. Miss Chow buys 17 pencils of \$2.5 each. How much should she pay?

- A. \$85
- B. \$42.5

14. 每枝鉛筆的售價是\$2.5，周老師購買17枝鉛筆，須付款多少？

- C. \$32.5
- D. \$19.5



15. The above 2 quadrilateral prisms are formed by 24 sticks of the same length and 16 plastic beads. These quadrilateral prisms are restructured to form 4 triangular prisms. How many extra sticks and plastic beads are needed at least?

- A. 3 sticks and 2 plastic beads
- B. 4 sticks and 4 plastic beads
- C. 12 sticks and 8 plastic beads
- D. 18 sticks and 10 plastic beads

15. 上圖的2個四角柱由24枝長度相同的竹簽及16粒膠珠組成。把這2個四角柱分拆重組成4個三角柱，最少額外需要多少竹簽及膠珠？

- A. 3枝竹簽和2粒膠珠
- B. 4枝竹簽和4粒膠珠
- C. 12枝竹簽和8粒膠珠
- D. 18枝竹簽和10粒膠珠

16. Which of the following about a rhombus is **not always** correct?

- A. It has two pairs of parallel opposite sides.
- B. It is a type of parallelogram.
- C. It has four equal sides.
- D. It has four right angles.

16. 下列哪項對菱形的描述不一定是正確的？

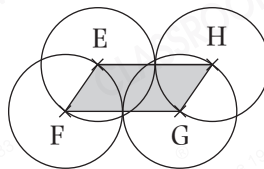
- A. 它有兩組對邊平行。
- B. 菱形是平行四邊形的一種。
- C. 它的四邊長度相等。
- D. 它有四個直角。

17. Sara walked 300m towards northeast and then walked 300m towards northwest, in which direction was the starting point from she?

- A. southwest
- B. southeast
- C. south
- D. north

17. 詩琳向東北方走了300m，再轉向西北方走了300m，起點在她的哪一方？

- A. 西南
- B. 東南
- C. 南
- D. 北



18. In the above figure, E, F, G and H are the centres of four circles of the same size. The diameter of each circle is 35cm. What is the perimeter of the shaded part?

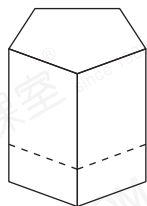
- A. 210cm
- B. 140cm
- C. 105cm
- D. 35cm

18. 上圖中，E、F、G和H是四個大小相同的圓的圓心，每個圓的直徑是35cm，陰影部分的周界是多少？

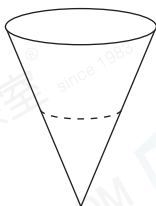
- A. 210cm
- B. 140cm
- C. 105cm
- D. 35cm

19. When the following solids are cut along the dotted lines horizontally, which cross section has the same shape and same size as the base?

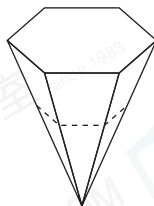
A.



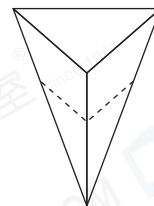
B.



C.



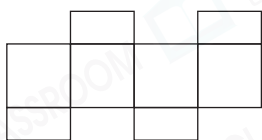
D.



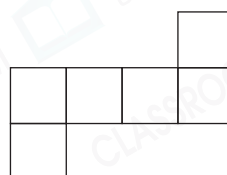
19. 以下哪一個立體，沿虛線水平切割後，所得截面的形狀和大小都與底相同？

20. Which of the following nets can be folded to make a cuboid?

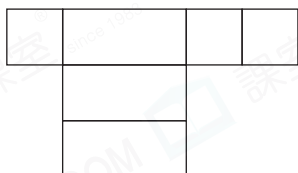
A.



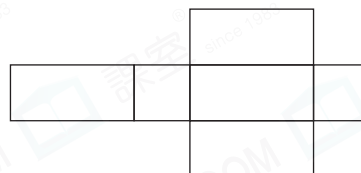
B.



C.



D.



20. 下列哪一個摺紙圖樣可以摺成一個長方體？

21. An iron wire is used to form a square of area 49cm^2 . Another iron wire is used to form a square of area 64cm^2 . What is the difference between the length of the two iron wires?

A. 1cm

B. 4cm

C. 15cm

D. 60cm

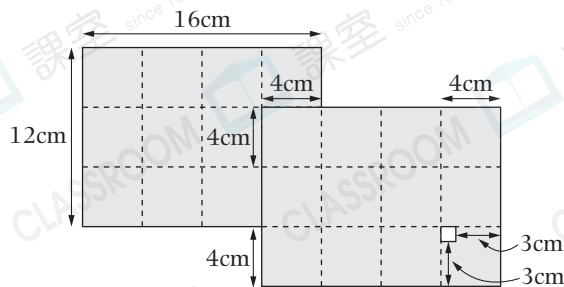
21. 一條鐵線可圍出一個面積是 49cm^2 的正方形，而另一條鐵線可圍出一個面積是 64cm^2 的正方形。兩條鐵線的長度相差多少？

A. 1cm

B. 4cm

C. 15cm

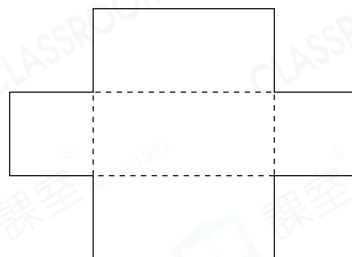
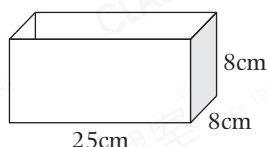
D. 60cm



22. Two rectangles of the same size are placed together. Parts of them are overlapped and a white portion is cut away as shown in the above figure. What is the area of the shaded part?

- A. 352cm^2 B. 351cm^2 C. 343cm^2 D. 159cm^2

22. 將兩個大小相同的長方形放在一起，其中部分重疊，並剪去白色部分，如上圖所示。陰影部分的面積是多少？



23. A cardboard box without lid is unfolded, as shown above. What is the area of the cardboard?

- A. 264cm^2 B. 528cm^2 C. 664cm^2 D. 728cm^2

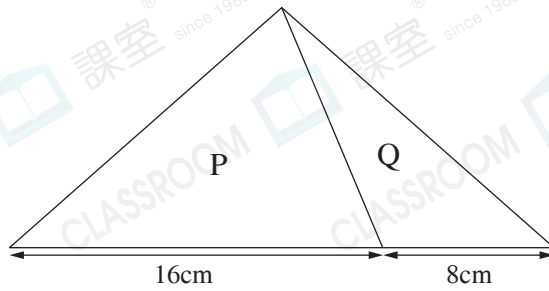
23. 如上圖所示，將一個無蓋卡紙盒展開。卡紙的面積是多少？

24. Philip ran from his home to school at 07:59 and arrived at 08:05. How long did he take?

- A. 4 minutes
B. 5 minutes
C. 6 minutes
D. 7 minutes

24. 文輝於07:59從家跑去學校，並在08:05到達。他共用了多少時間？

- A. 4分鐘
B. 5分鐘
C. 6分鐘
D. 7分鐘

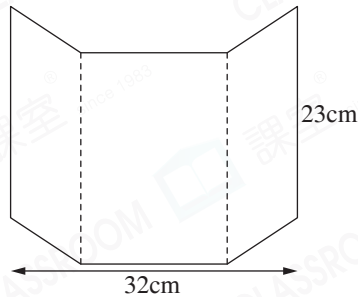


25. In the above figure, P and Q are two triangles. The area of P is 50cm^2 , what is the area of Q?

- A. 25cm^2
- B. 30cm^2
- C. 40cm^2
- D. 100cm^2

25. 上圖中，P和Q是兩個三角形。P的面積是 50cm^2 ，Q的面積是多少？

- A. 25cm^2
- B. 30cm^2
- C. 40cm^2
- D. 100cm^2

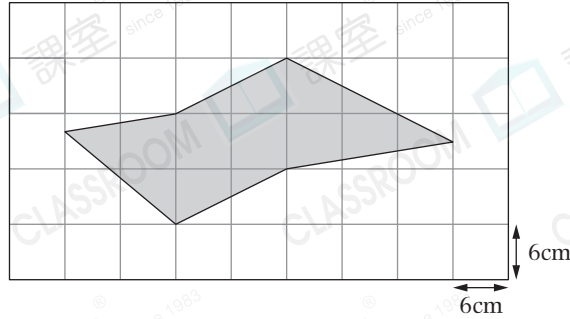


26. The above figure is formed by two parallelograms of the same size and a rectangle. If the area of each parallelogram is 184cm^2 , what is the area of the whole figure?

- A. 202cm^2
- B. 368cm^2
- C. 552cm^2
- D. 736cm^2

26. 上圖是由兩個大小相同的平行四邊形及一個長方形拼成。如果每個平行四邊形的面積是 184cm^2 ，全圖的面積是多少？

- A. 202cm^2
- B. 368cm^2
- C. 552cm^2
- D. 736cm^2



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

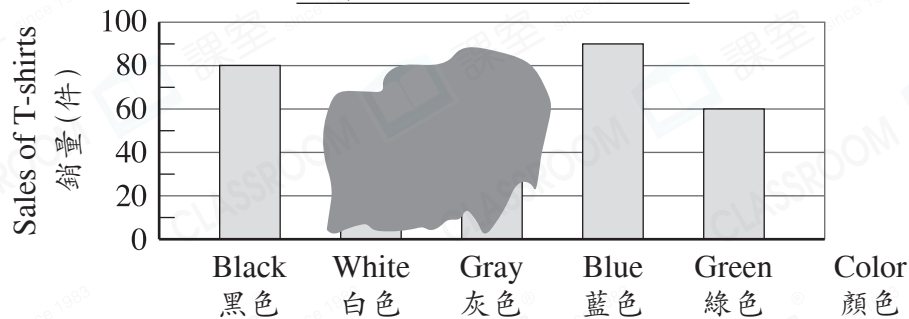
- A. 288cm^2
- B. 324cm^2
- C. 360cm^2
- D. 396cm^2

27. 上圖中，陰影部分的面積是多少？

- A. 288cm^2
- B. 324cm^2
- C. 360cm^2
- D. 396cm^2

Sales of T-shirts in a Clothes Shop Last Week

服裝店上星期T恤的銷量



28. The above graph shows the sales of T-shirts in a clothes shop last week, but part of it is covered with dirt. It is given that the clothes shop sold 350 T-shirts last week, and the sales of white T-shirts is 2 times the sales of gray T-shirts. How many gray T-shirts were sold?

A. 120

B. 80

C. 60

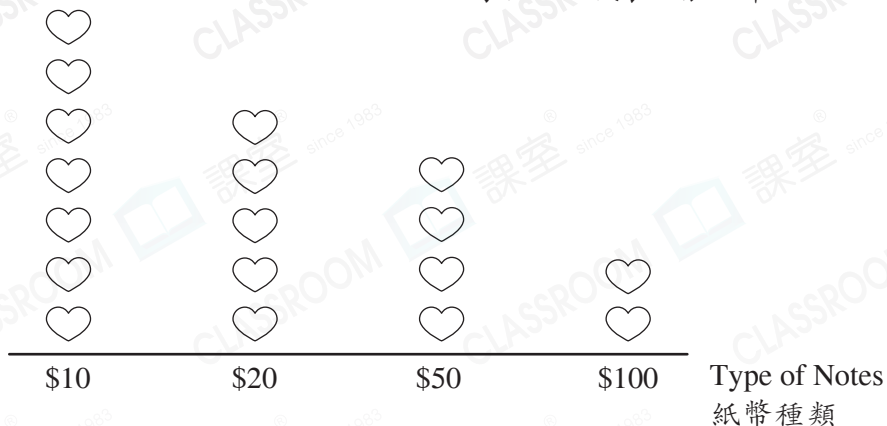
D. 40

28. 上圖顯示了服裝店上星期T恤的銷量，但部分被塗污了。已知服裝店上星期售出了350件T恤，而且白色T恤的銷量是灰色T恤的2倍，那麼灰色T恤的銷量是多少件？

Amount Raised by Class 5A

5A 班籌得的善款

Each stands for 1 note
每個 代表 1 張紙幣



29. According to the above graph, what is the total amount raised by Class 5A?

- A. \$180
- B. \$360
- C. \$570
- D. \$5700

29. 根據上圖，5A 班籌得的善款總值是多少？

- A. \$180
- B. \$360
- C. \$570
- D. \$5700

30. Study the following expression:

$$\begin{array}{|c|c|}
 \hline
 4 & T \\
 \hline
 + & Y & 9 \\
 \hline
 \hline
 8 & 6 \\
 \hline
 \end{array}$$

Find the result of $T \times Y$.

- A. 3
- B. 7
- C. 10
- D. 21

30. 觀察以下的算式：

$$\begin{array}{|c|c|}
 \hline
 4 & T \\
 \hline
 + & Y & 9 \\
 \hline
 \hline
 8 & 6 \\
 \hline
 \end{array}$$

找出 $T \times Y$ 的結果。

- A. 3
- B. 7
- C. 10
- D. 21

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。

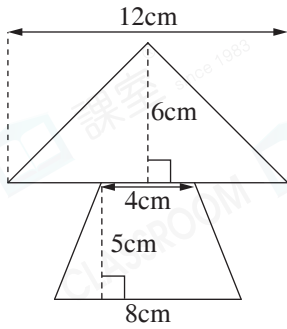


Figure 1
圖一

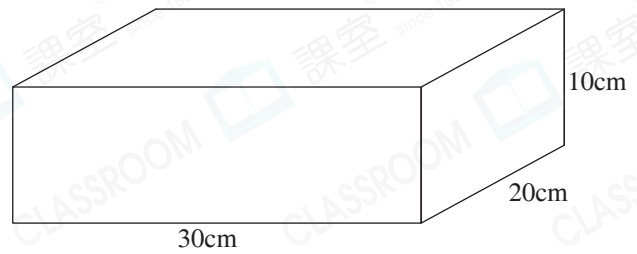


Figure 2
圖二

31. (a) Figure 1 is a wooden board painting, what is its area?
[4 marks]
- (b) The wooden board painting was put into the cuboid box in Figure 2. On the answer sheet, draw the net of this cuboid box.
[2 marks]

31. (a) 圖一是一幅木板畫，它的面積是多少？ [4分]
- (b) 把圖一的木板畫放進圖二長方體的盒子，在答題紙上畫出這個盒子的摺紙圖樣。 [2分]

Kodex Company

加德公司

Diesel oil \$9.1 per litre

柴油 每升 \$9.1

Enjoy a rate of \$0.8 less per litre if paid by credit card

使用任何信用卡，每升可便宜 \$0.8

Wise Company

惠士公司

Diesel oil \$9.1 per litre

柴油 每升 \$9.1

Enjoy a rate of \$7.9 per litre if paid by cash

以現金付款，每升只須 \$7.9

32. Mr Lee wants to fill his car with 40L of diesel oil.

(a) If he uses cash payment in Wise Company, how much should he pay? [4 marks]

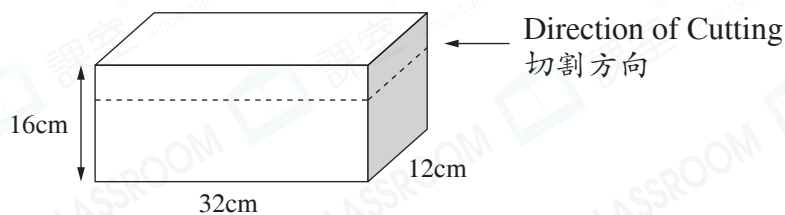
(b) If he uses a credit card in Kodex Company, what is the price of each litre of diesel oil? (Give the answer only) [2 marks]

32. 李先生想為汽車加 40L 柴油。

(a) 如果他惠顧惠士公司並以現金付款，共應付款多少？

[4分]

(b) 如果他惠顧加德公司使用信用卡付款，每升柴油價值多少？(只須寫出答案) [2分]



33. (a) If the cuboid is cut horizontally along the dotted line, what is the shape of the cross section? On the answer sheet, write your answer and then draw the shape.

[2 marks]

33. (a) 如果將長方體沿虛線水平切割，切割出來截面的形狀是什麼？在答題紙上寫出答案，然後畫出該圖形。 [2分]

33. (b) What is the perimeter of the cross section in part (a)? [4 marks]

33. (b) 根據(a)部分，切割出來截面的周界是多少？ [4分]

34. John has 24 \$2 coins, which is $\frac{1}{5}$ of all his coins. The remaining coins are \$5 coins.

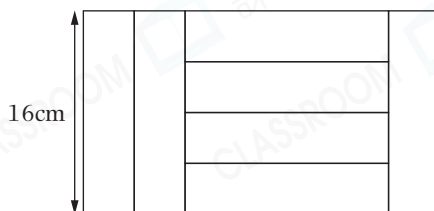
34. 志忠有24個2元硬幣，佔全部硬幣的 $\frac{1}{5}$ ，剩下的是5元硬幣。

(a) How many coins does John have in total? (Use equation to solve the problem and show your working) [4 marks]

(a) 志忠共有硬幣多少個？(須用方程列式計算，並展示步驟) [4分]

(b) What is the total amount of all the coins that John has? [4 marks]

(b) 志忠的硬幣的總值是多少？ [4分]



35. (a) The above figure is made up of 7 rectangles of the same size and same shape. What is the perimeter of each rectangle? (Give the answer only) [2 marks]

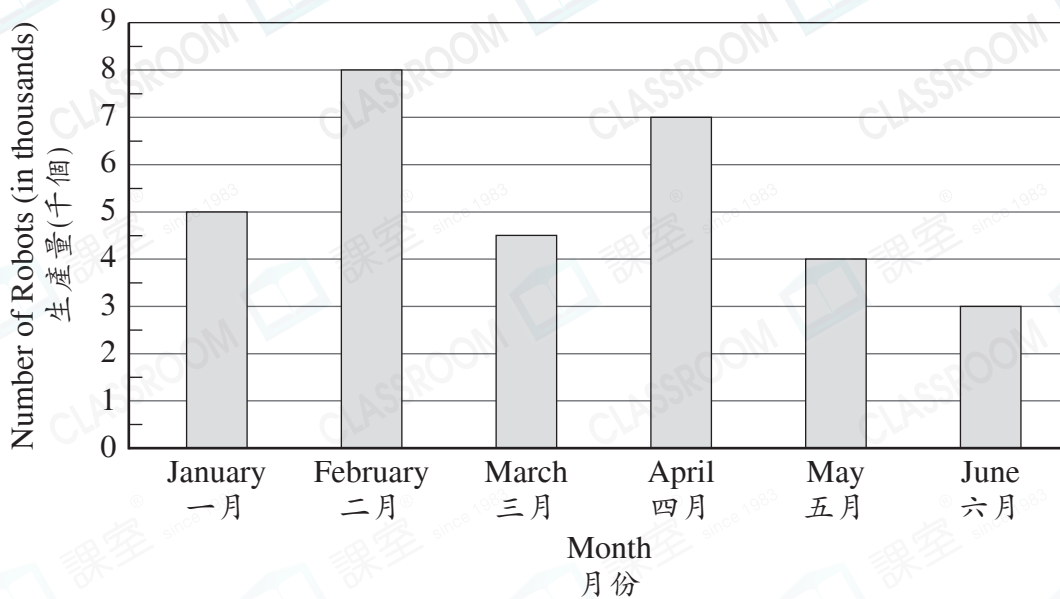
35. (a) 上圖由七個大小和形狀相同的長方形組成，每個長方形的周界是多少？(只須寫出答案) [2分]

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

(b) 整個圖形的面積是多少？ [4分]

Production of Robots in a Toy Company in the First Half Year

某玩具公司上半年機械人的生產量



36. The above graph shows the production of robots in a toy company in the first half year.

- (a) In the first half year, in which months were the production of robots greater than 6000 robots? (Give the answer only) [2 marks]
- (b) How many more robots were produced in March than in June? (Give the answer only) [2 marks]
- (c) The cost of producing a robot is \$35. What was the total cost of producing robots in the second quarter? [4 marks]

36. 上圖顯示某玩具公司上半年機械人的生產量。

- (a) 上半年中，在哪些月份的機械人的生產量多於6000個？(只須寫出答案) [2分]
- (b) 三月生產的機械人比六月的多多少個？(只須寫出答案) [2分]
- (c) 生產一個機械人的費用是\$35。第二季生產機械人的總費用是多少？ [4分]