

Hong Kong Attainment Test Pre-Secondary 1

香港學科測驗中一入學前

Mathematics

數學

Mock Paper 3

模擬試卷(三)

六年級上學期

Paper 3
三卷紙

題號	考核重點	範疇	題號	考核重點	範疇	
1	倍數(4上)	數	23	體積(5下)	度量	
2	公因數(4上)		24	容量和體積(6上)		
3	分數加法(5上)		25	周界(4上)、面積(4下)		
4	整數乘法(4上)		26	體積(5下)		
5	分數和百分數的互化(6上)		27	平均數(6上)		數據處理
6	百分數的認識(6上)		28	象形圖(5上)		
7	分數四則混合計算(5下)		29	複合棒形圖(5下)		
8	多位數(5上)		30	方程(5下)	代數	
9	整數除法(4上)		圖形與空間	31(a)	立體的截面(6上)	圖形與空間
10	小數除法(6上)			31(b)	面積(5上)	度量
11	小數四則混合計算(6上)			31(c)	立體的截面(6上)、 周界(4上)	
12	小數、分數和百分數的大小比較(6上)			32(a)	體積(5下)	
13	整數四則混合計算(4下)			32(b)	不規則立體的體積(6上)	數
14	小數減法(5下)			33(a)	小數除法(6上)	
15	對稱(4下)			33(b)	整數四則混合計算(4下)	
16	圖形拼砌與分割(4下)	33(c)		整數四則混合計算(4下)	數據處理	
17	八個方向(5上)	34(a)		平均數、棒形圖(6上)		
18	立體的頂、棱、面(6上)	34(b)		棒形圖(6上)	數	
19	摺紙圖樣(5下)	35	小數四則混合計算(6上)			
20	八個方向(5上)	度量	36(a)	方程(5下)	代數	
21	周界(4上)、面積(4下)		36(b)	小數加減混合計算(5下)	數	
22	容量和體積(6上)					

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。

Note:
Not all diagrams are drawn to scale.

注意：
部分附圖不依比例繪畫。

SECTION A (60 marks)

甲部 (60分)

Choose the correct answer. You only need to write down the letter preceding the selected answer.

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 18 between 80 and 210?

- A. 198
- B. 270
- C. 288
- D. 306

1. 在 80 至 210 之間，18 的最小和最大的倍數之和是多少？

- A. 198
- B. 270
- C. 288
- D. 306

2. How many common factors are there for 16 and 60?

- A. 5
- B. 4
- C. 3
- D. 2

2. 16 和 60 的公因數共有多少個？

- A. 5
- B. 4
- C. 3
- D. 2

3. If $\frac{\diamond}{2} + \frac{\star}{6} = \frac{1}{4}$, which of the following is equal to 3?

- A. $3\diamond + 3\star$
- B. $3\diamond - 3\star$
- C. $2\diamond + 6\star$
- D. $6\diamond + 2\star$

3. 如果 $\frac{\diamond}{2} + \frac{\star}{6} = \frac{1}{4}$ ，那麼下列哪一項等於 3？

- A. $3\diamond + 3\star$
- B. $3\diamond - 3\star$
- C. $2\diamond + 6\star$
- D. $6\diamond + 2\star$

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

- A. 10098
- B. 9999
- C. 9900
- D. 9800

4. 最小的三位奇數和最大的兩位數相乘的結果是多少？

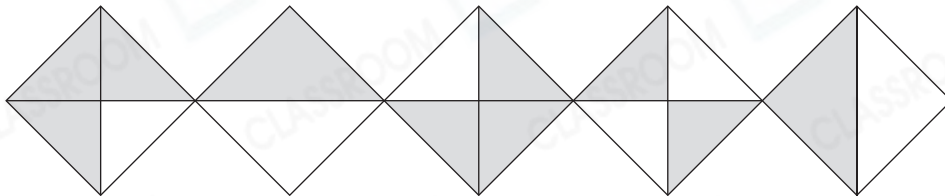
- A. 10098
- B. 9999
- C. 9900
- D. 9800

5. Given that $\frac{7}{16}$ equals 43.75%, express $\frac{7}{1600}$ as a percentage.

- A. 0.4375%
- B. 4.375%
- C. 437.5%
- D. 4375%

5. 已知 $\frac{7}{16}$ 等於43.75%，把 $\frac{7}{1600}$ 寫成百分數。

- A. 0.4375%
- B. 4.375%
- C. 437.5%
- D. 4375%



6. The above figure is formed by 5 squares of the same size. What percentage of the whole figure is shaded?

- A. $\frac{1}{2}\%$
- B. $\frac{3}{5}\%$
- C. 50%
- D. 60%

6. 上圖由5個大小相同的正方形組成，陰影部分佔全圖的百分之幾？

- A. $\frac{1}{2}\%$
- B. $\frac{3}{5}\%$
- C. 50%
- D. 60%

7. A cup costs $\$37\frac{1}{10}$, a toothbrush costs $\$18\frac{1}{2}$. My sister has \$100. After buying a cup, how many toothbrushes at most can she buy with the money left?



- A. 2
- B. 3
- C. 4
- D. 5

7. 杯子每個售 $\$37\frac{1}{10}$ ，牙刷每枝售 $\$18\frac{1}{2}$ 。妹妹有 \$100，她買了一個杯子後，餘款最多可買牙刷多少枝？



- A. 2
- B. 3
- C. 4
- D. 5

8. Last year, the sales of a restaurant was \$3 347 156, which was half of this year's. What is the sales of the restaurant this year when corrected to the nearest ten thousand?

- A. \$6 000 000
- B. \$6 600 000
- C. \$6 690 000
- D. \$6 700 000

8. 餐廳去年的營業額是 \$3 347 156，恰巧是今年營業額的一半。餐廳今年的營業額，如準確至萬元，應是多少？

- A. \$6 000 000
- B. \$6 600 000
- C. \$6 690 000
- D. \$6 700 000

9. The government bought 654 computers. How many more computers would be needed at least so that all the computers could be shared equally among 15 schools?

- A. 44
- B. 43
- C. 9
- D. 6

9. 政府購買了 654 部電腦，最少要多添幾部才能把電腦平均分配給 15 間學校？

- A. 44
- B. 43
- C. 9
- D. 6

10. A shopkeeper put 26.8kg of fudge into packets of 0.22kg each. How many packets of fudge could he pack at most? How much fudge was left?

- A. 128 packets, with 0.2kg left
- B. 121 packets, with 0.18kg left
- C. 18 packets, with 2kg left
- D. 12 packets, with 1.8kg left


10. 糖果店店主將26.8kg的軟糖分裝成每袋0.22kg出售，他可把軟糖分成多少袋？餘下軟糖重多少？

- A. 128袋，餘下0.2kg
- B. 121袋，餘下0.18kg
- C. 18袋，餘下2kg
- D. 12袋，餘下1.8kg


Happy Stationery Store
快樂文具店

Pencil (each box) \$20.80
鉛筆 (每盒)

Buy one box and get one extra eraser
每購買一盒，多送擦膠一塊

 11. Customers can get an eraser by every spending of \$15 in Happy Stationery Store. Jason bought 3 boxes of pencils, how many erasers did he get altogether?

- A. 8
- B. 7
- C. 5
- D. 4

 11. 在快樂文具店，顧客每消費滿\$15可獲擦膠一塊。家樂買了3盒鉛筆，他共得擦膠多少塊？

- A. 8
- B. 7
- C. 5
- D. 4

12. Which of the following numbers lies between 41% and 0.58?



- A. $\frac{9}{16}$
- B. 0.65
- C. 60%
- D. $\frac{2}{5}$

12. 下列哪一個數是在41%和0.58之間?



- A. $\frac{9}{16}$
- B. 0.65
- C. 60%
- D. $\frac{2}{5}$

13. A dozen egg tarts cost \$18. Ken has \$72. How many egg tarts can he buy at most?

- A. 4
- B. 6
- C. 48
- D. 108

13. 一打蛋撻售\$18，栢軒有\$72，最多可買蛋撻多少個?

- A. 4
- B. 6
- C. 48
- D. 108

8

5

.

1

14. Using all the four cards above, Kathy formed the largest number with one place of decimal while Jame formed the smallest number with two places of decimal. What was the difference between the numbers they formed?

- A. 6.93
- B. 14.22
- C. 83.25
- D. 83.52

14. 利用以上全部的四張卡，嘉儀拼出一個最大的一位小數，而嘉駿則拼出一個最小的兩位小數，他們所拼出的數相差多少?

- A. 6.93
- B. 14.22
- C. 83.25
- D. 83.52

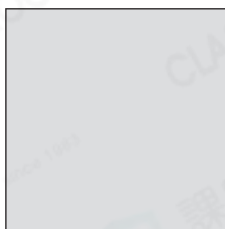


15. How many lines of symmetry does the above figure have?

- A. 0
- B. 1
- C. 3
- D. 5

15. 以上的圖形有多少條對稱軸？

- A. 0
- B. 1
- C. 3
- D. 5



16. The above figure is a square. Ken cuts it into four figures of the same size and same shape. Which of the following shapes can he obtain?



- I. square
- II. rectangle
- III. parallelogram
- IV. trapezium

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

16. 上圖是一個正方形。健能把它分割成四個大小和形狀相同的圖形，他可得出以下哪些圖形？



- I. 正方形
- II. 長方形
- III. 平行四邊形
- IV. 梯形

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

17. If the library is south-west of the shop, which of the following diagrams has the correct compass sign?



17. 如果圖書館在商店的西南方，以下哪一個圖的方向標示是正確的？



Plastic stick X
膠棒 X



Plastic stick Y
膠棒 Y



Plastic ball
膠珠

18. There are 5 plastic sticks X, 3 plastic sticks Y and 4 plastic balls. How many more of each type will be needed at least to make a cuboid?

18. 現有 5 枝膠棒 X、3 枝膠棒 Y 及 4 粒膠珠。如果要砌出一個長方體，最少還需要各類材料多少？

Plastic stick X
膠棒 X

Plastic stick Y
膠棒 Y

Plastic ball
膠珠

- | | | | |
|----|---|---|---|
| A. | 1 | 4 | 3 |
| B. | 3 | 2 | 3 |
| C. | 3 | 1 | 4 |
| D. | 2 | 3 | 1 |

O			
P	R	S	T
Q			

19. Which letter is opposite to the letter S in the solid formed by the above net?



- A. O
- B. P
- C. Q
- D. R

19. 上圖的摺紙圖樣摺合成的立體中，S的對面是哪一個字母？



- A. O
- B. P
- C. Q
- D. R

	×			×	
	Car Park			Restaurant	
	停車場			餐館	
			×		
			Zoo		
			動物園		
	Library			Bus Stop	
	圖書館			巴士站	

20. The above plan shows the area near a Zoo. The Bus Stop is in the south of the Library. Bob is at the Zoo and wants to go to the Car Park. In which direction should he go in order to take the shortest route?

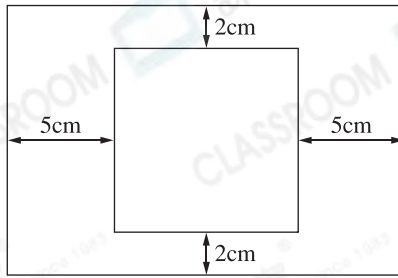


- A. north-east
- B. south-east
- C. north-west
- D. south-west

20. 以上是動物園附近的地圖，巴士站是在圖書館的南方。日照在動物園，他要去停車場，他應向哪個方向走，路程才是最短的？



- A. 東北
- B. 東南
- C. 西北
- D. 西南



21. The above figure is formed by a rectangle and a square. The area of the square is 100cm^2 . What is the perimeter of the rectangle?

- A. 54cm
- B. 60cm
- C. 68cm
- D. 114cm

21. 上圖是由一個長方形和一個正方形組成。正方形的面積是 100cm^2 ，那麼長方形的周界是多少？

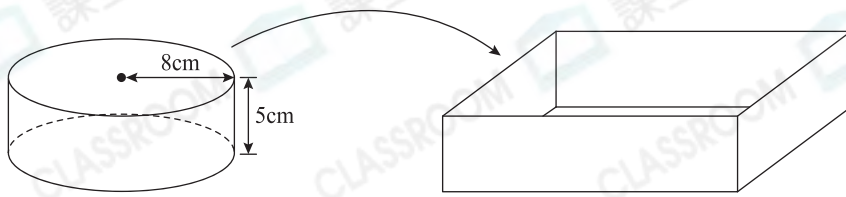
- A. 54cm
- B. 60cm
- C. 68cm
- D. 114cm

22. The capacity of a bucket was 9600mL. $\frac{7}{8}$ of it was filled with water. After a stone was immersed in the water, 300mL of the water overflowed. What was the volume of the stone?

- A. 8700cm^3
- B. 8100cm^3
- C. 1500cm^3
- D. 900cm^3

22. 一個桶的容量是 9600mL，盛載了 $\frac{7}{8}$ 桶水。把一塊石頭完全放入水中，溢出水 300mL，該石頭的體積是多少？

- A. 8700cm^3
- B. 8100cm^3
- C. 1500cm^3
- D. 900cm^3



23. There is a cylindrical cake. Its radius is 8cm and height is 5cm. It is just fit when being put into a rectangular box. What is the least volume of the box?

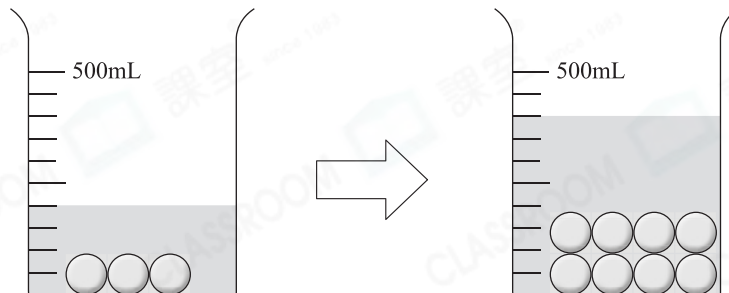


- A. 320cm^3
- B. 640cm^3
- C. 1280cm^3
- D. 2560cm^3

23. 一個圓柱體的蛋糕半徑是8cm，高是5cm，剛好可以放進一個長方體盒內，這個長方體盒子的體積最小是多少？



- A. 320cm^3
- B. 640cm^3
- C. 1280cm^3
- D. 2560cm^3



24. There were some water and 3 spheres in the container originally. After 5 spheres were added to the container, the water level in the container went up, as shown above. What is the total volume of these 8 spheres?

- A. 560cm^3
- B. 400cm^3
- C. 320cm^3
- D. 200cm^3

24. 如上圖所示，容器內原先盛載着一些水和3個球體，加入5個球體後，容器內的水位上升。這8個球體的總體積是多少？

- A. 560cm^3
- B. 400cm^3
- C. 320cm^3
- D. 200cm^3

25. Two ribbons are used to form squares of areas 49cm^2 and 81cm^2 respectively. What is the total length of the two ribbons?

- A. 16cm
- B. 28cm
- C. 64cm
- D. 80cm

25. 兩條絲帶分別圍出面積是 49cm^2 和 81cm^2 的正方形，兩條絲帶共長多少？

- A. 16cm
- B. 28cm
- C. 64cm
- D. 80cm

26. A wood-block can be cut into 54 cubes each of side 5cm. What is the volume of the wood-block?

- A. 25cm^3
- B. 125cm^3
- C. 1350cm^3
- D. 6750cm^3

26. 一根木條剛好可分割成 54 個正方體，每個正方體的邊長是 5cm。木條的體積是多少？

- A. 25cm^3
- B. 125cm^3
- C. 1350cm^3
- D. 6750cm^3

27. From Monday to Friday, the juice shop sold 146 cups of apple juice every day on average. It sold 203 and 285 cups of apple juice on Saturday and Sunday respectively. What was the average sales of apple juice that week?

- A. 216
- B. 211
- C. 174
- D. 104

27. 果汁店在星期一至五平均每天售出 146 杯蘋果汁，星期六和星期日分別售出 203 杯和 285 杯蘋果汁，果汁店該星期平均每天的蘋果汁銷量是多少杯？

- A. 216
- B. 211
- C. 174
- D. 104



28. The manager wanted to use the graph below to show the sales of cakes in different bakeries last week, but he recorded the sales of Bakery C by mistake.



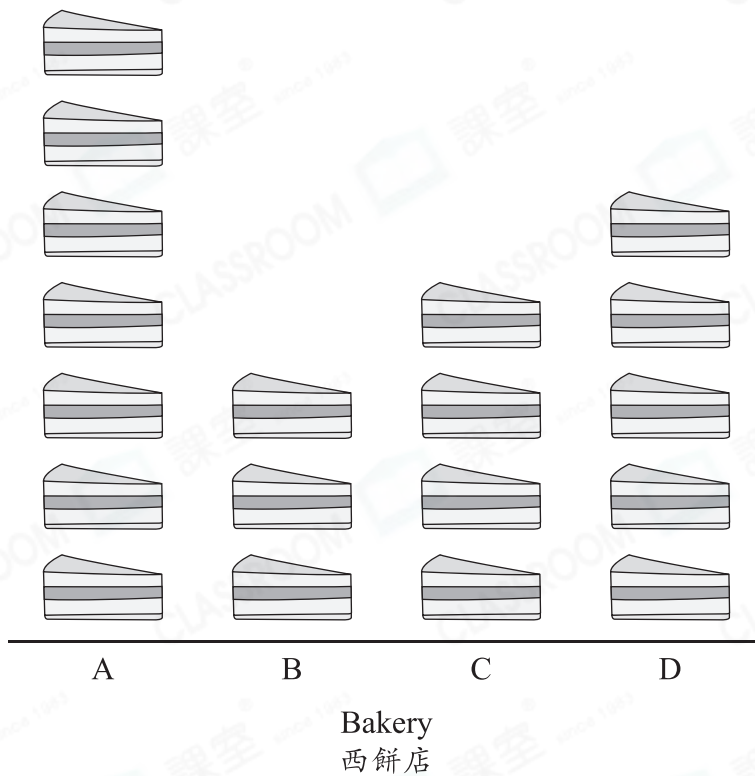
28. 經理嘗試用下圖來表示上星期不同西餅店的西餅銷售量，但他把C店的記錄畫錯了。



Sales of Cakes Last Week

上星期西餅的銷售量

Each  stands for 100 cakes
每個  代表100件西餅



According to the correct sales record, the average sales of each bakery were 600 cakes last week. How many cakes were sold in Bakery C?

- A. 1500
- B. 900
- C. 15
- D. 9

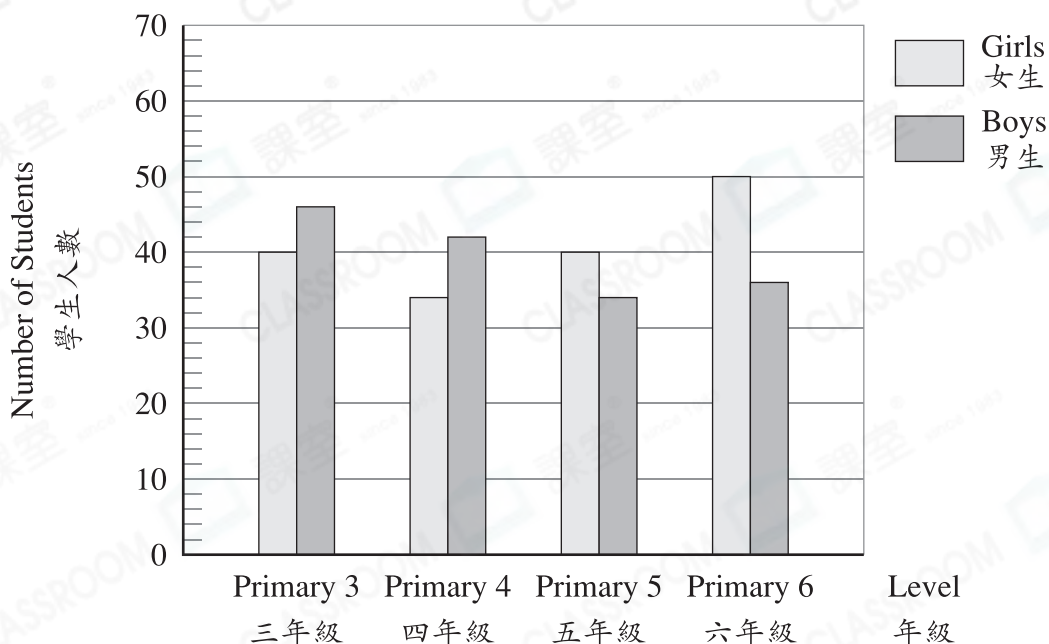
根據正確的銷售記錄，上星期平均每間西餅店售出600件西餅。那麼，C店售出西餅多少件？

- A. 1500
- B. 900
- C. 15
- D. 9



Number of Students Who Go Hiking

參加遠足活動的學生人數



29. According to the above graph, which two levels have the same number of students who go hiking?

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

29. 根據上圖，哪兩個年級參加遠足活動的學生人數相同？

- A. 三年級和四年級
- B. 四年級和五年級
- C. 四年級和六年級
- D. 三年級和六年級

30. If $76R = 684$, then $3R = ?$

- A. 3
- B. 9
- C. 18
- D. 27

30. 如果 $76R = 684$ ，那麼 $3R = ?$

- A. 3
- B. 9
- C. 18
- D. 27

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。

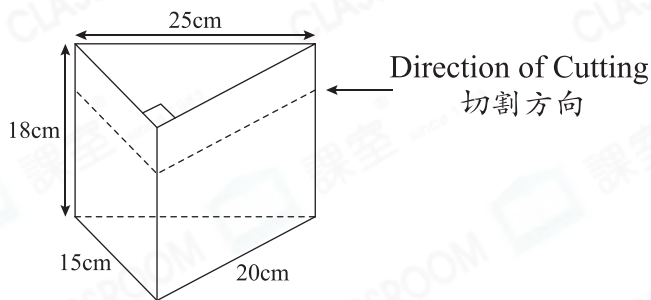


Figure 1
圖一

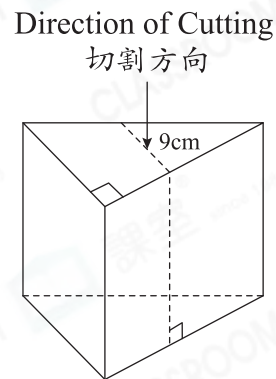
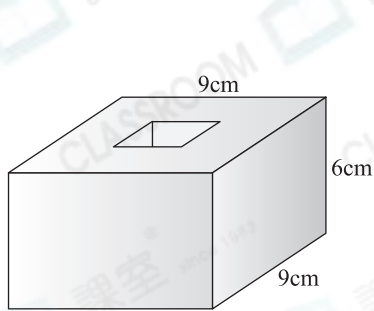


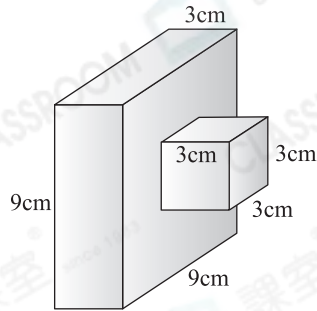
Figure 2
圖二

31. (a) If the triangular prism is cut horizontally along the dotted lines as shown in Figure 1, what is the shape of the cut section? (Give the answer only) [2 marks]
- (b) What is the area of the cut section in part (a)? (Give the answer only) [2 marks]
- (c) If the triangular prism is cut vertically along the dotted lines as shown in Figure 2, what is the perimeter of the cut section? [4 marks]

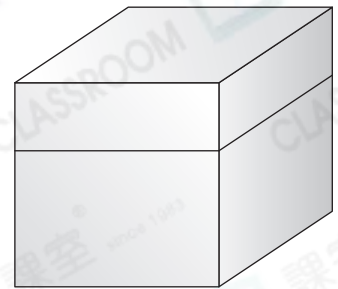
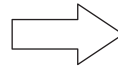
31. (a) 如果把三角柱體沿虛線水平切割，如圖一所示，切割出來截面是什麼形狀？(只須寫出答案) [2分]
- (b) 根據(a)部，切割出來截面的面積是多少？(只須寫出答案) [2分]
- (c) 如果把三角柱體沿虛線垂直切割，如圖二所示，切割出來截面的周界是多少？ [4分]



Solid A
立體A



Solid B
立體B



32. Solid A and Solid B can be put together to form a cube, as shown above.

(a) What is the volume of Solid B?
(Give the answer only)

[2 marks]

(b) Amy puts the cube into the water in the following tank. How much does the water level in the tank rise?

[4 marks]

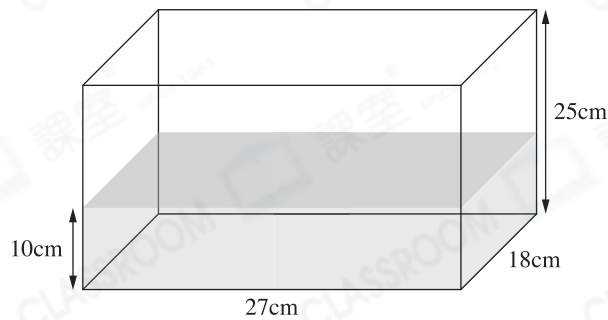
32. 立體A和立體B剛好可以合併成一個正方體，如上圖所示。

(a) 立體B的體積是多少？(只須寫出答案)

[2分]

(b) 思琪把這個正方體放入下面的水箱，水箱的水位會上升多少？

[4分]



Fresh Grocery Store

新鮮雜貨店

One stamp will be rewarded for every purchase of \$9.5. Members can enjoy the offers below:

購物每滿 \$9.5 可獲贈印花一個，會員可享有以下優惠：

Offer 1 優惠一	8 stamps will be rewarded for every purchase of \$60 購物每滿 \$60 可獲贈印花 8 個
Offer 2 優惠二	12 stamps will be rewarded for every purchase of \$80 購物每滿 \$80 可獲贈印花 12 個

Customers can get an egg for free for 6 stamps.

顧客用 6 個印花可免費換領一隻雞蛋。

33. (a) Mrs Cheung was not a member of Fresh Grocery Store. She spent \$190. How many eggs could she get at most and how many stamps were left? [4 marks]

(b) If Mrs Lee is a member of Fresh Grocery Store and spends \$240, can she get 7 eggs? Explain. [2 marks]

(c) Carrie was a member of Fresh Grocery Store. How much should she spend at least in order to get 4 eggs? (Give the answer only) [2 marks]

33. (a) 張太太不是新鮮雜貨店的會員，她購物用去 \$190，她最多可換領雞蛋多少隻？餘下印花多少個？ [4分]

(b) 如果李太太是新鮮雜貨店的會員，並購物用去 \$240，她能否換領 7 隻雞蛋？試解釋。 [2分]

(c) 嘉琪是新鮮雜貨店的會員，她想換領 4 隻雞蛋，最少須消費多少？(只須寫出答案) [2分]

34. The graph below shows the number of towels produced and ordered in factory X in the first half year. When the amount produced is greater than the amount ordered in a certain month, the staff puts the remaining in the warehouse. When the amount produced is less than the amount ordered in a certain month, the staff uses these towels in the warehouse to fulfill the orders.

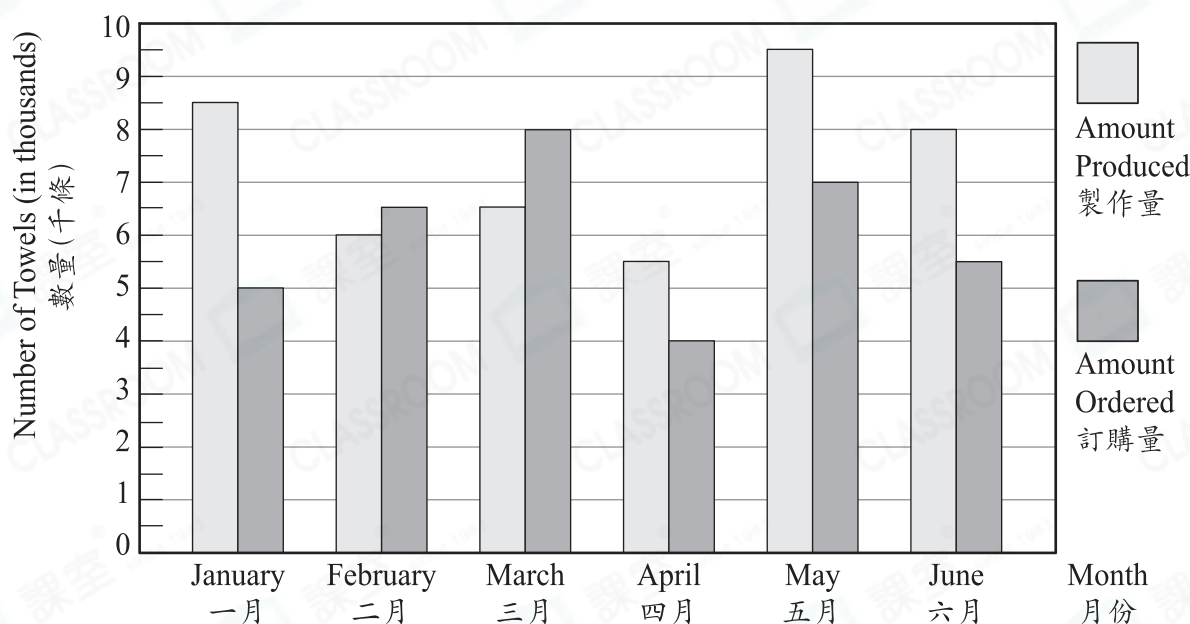


34. 下圖顯示了工廠X上半年毛巾的製作量和訂購量。當某月的製作量多於訂購量時，工人會把剩餘的毛巾存放在倉庫。當某月的製作量少於訂購量時，工人會使用倉庫裏的毛巾來滿足訂購量。



Number of Towels Produced and Ordered in Factory X in the First Half Year

工廠X上半年的毛巾製作量和訂購量



- (a) What was the average monthly number of towels ordered in factory X in the first half year? [4 marks]
- (b) From January to March, do you think factory X had enough towels to fulfill the amount ordered? Explain. [4 marks]

- (a) 工廠X上半年平均每月的毛巾訂購量是多少條？ [4分]
- (b) 由一月至三月，工廠X是否有足夠的毛巾製作量以滿足訂購量？試解釋。 [4分]

Table of Price

價目表

Storybook (per book)	
故事書 (每本)	\$55.50
Bookmark (per)	
書籤 (每張)	\$12.60

35. Mr Lee wants to buy some storybooks and bookmarks for his three nephews as gifts. If each of them would get three storybooks and four bookmarks, according to the above table, how much should he pay? [4 marks]

35. 李先生打算購買一些故事書和書籤送給三個侄子。如果他們各得3本故事書和4張書籤，根據上表，他應付款多少？ [4分]

36. (a) Jason had \$240. The amount of Jason was 3 times of Watson's. How much did Watson have? (Use equation to solve the problem and show your working) [4 marks]

36. (a) 健生有\$240，他有的款項是健華的3倍。健華有的款項是多少？(須用方程列式計算) [4分]

(b) After they jointly bought a gift costing \$280.8 for their mother, how much did they have? (Give the answer only) [2 marks]

(b) 他們合資買了一份價值\$280.8的禮物送給媽媽後，還剩多少？(只須寫出答案) [2分]

End of Test Paper

測驗卷完

Hong Kong Attainment Test Pre-Secondary 1

香港學科測驗中一入學前

Mathematics Mock Paper 3

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	1-14	15-20	21-26	27-29	30
	Marks 分數					
Section B 乙部	31(a)					
	31(b)					
	31(c)					
	32(a)					
	32(b)					
	33(a)					
	33(b)					
	33(c)					
	34(a)					
	34(b)					
	35					
	36(a)					
36(b)						
(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

<p>31(a). The shape of the cut section is _____ . 切割出來截面的形狀是_____。</p>	<p>2</p>
<p>31(b). The area is _____ cm^2. 面積是_____ cm^2。</p>	<p>2</p>
<p>31(c).</p>	<p>4</p>
<p>32(a). The volume of Solid B is _____ cm^3. 立體B的體積是_____ cm^3。</p>	<p>2</p>
<p>32(b).</p>	<p>4</p>

Go On To Next Page

轉下頁續答

<p>33(a).</p>	<p>4</p>
<p>33(b). Because 因為</p> <p>* can / cannot (*Circle the answer) * 能 / 不能 (*圈出答案)</p>	<p>2</p>
<p>33(c). She should spend \$ _____ at least. 她最少消費\$ _____。</p>	<p>2</p>
<p>34(a).</p>	<p>4</p>

Go On To Next Page

轉下頁續答

Marks
估分

For Teachers Use
供教師用

<p>34(b). Because 因為</p> <p>* enough / not enough (*Circle the answer) * 足夠 / 不足夠 (*圈出答案)</p>	4
<p>35.</p>	4
<p>36(a).</p>	4
<p>36(b). They had \$ _____ . 他們還剩 \$ _____ 。</p>	2

END
完