

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. Express the number 4 852 436 to the nearest million.

- A. 4 000 000
- B. 4 852 400
- C. 4 900 000
- D. 5 000 000

1. 把4 852 436這個數取近似值至百萬位。

- A. 4 000 000
- B. 4 852 400
- C. 4 900 000
- D. 5 000 000

2. Given that $\frac{3}{25}$ equals 12%, express $\frac{3}{2500}$ as a percentage.

- A. 0.12%
- B. 1.2%
- C. 120%
- D. 1200%

2. 已知 $\frac{3}{25}$ 等於12%，把 $\frac{3}{2500}$ 寫成百分數。

- A. 0.12%
- B. 1.2%
- C. 120%
- D. 1200%

3. The L.C.M. of X and 8 is 72. Which of the following cannot be the value of X ?

- A. 9
- B. 24
- C. 36
- D. 72

3. X 和8的L.C.M.是72，下列哪一個不可能是 X 的值？

- A. 9
- B. 24
- C. 36
- D. 72

4. Bob had savings of \$210 while his brother had \$90. Each of them used $\frac{2}{3}$ of their savings to buy a tie for their father and \$1.2 was left. How much did the tie cost?

- A. \$198.8
- B. \$200
- C. \$200.8
- D. \$201.2

4. 少平有儲蓄 \$210，弟弟有儲蓄 \$90，他們各自拿出儲蓄的 $\frac{2}{3}$ ，合資購買一條領帶送給爸爸，還餘下 \$1.2。這條領帶的售價是多少？

- A. \$198.8
- B. \$200
- C. \$200.8
- D. \$201.2

Happy Stationery Shop
快樂文具店

Pencils (each box) \$18.60
鉛筆 (每盒)



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

5. Customers can get one eraser by every spending of \$25. William bought 4 boxes of pencils, how many erasers did he get altogether?

- A. 7
- B. 6
- C. 4
- D. 2

5. 顧客每消費滿 \$25 可獲擦膠一塊。緯鈞買了 4 盒鉛筆，他共得擦膠多少塊？

- A. 7
- B. 6
- C. 4
- D. 2

6. There are 128 Primary 6 students. $\frac{3}{4}$ of them passed the Mathematics examination. Among these students, $\frac{1}{8}$ got full marks. How many Primary 6 students got full marks?

- A. 12
- B. 16
- C. 32
- D. 96

6. 六年級有學生128人，其中的 $\frac{3}{4}$ 在數學科考試中取得及格成績，而及格的學生中有 $\frac{1}{8}$ 取得滿分。六年級取得滿分的學生有多少人？

- A. 12
- B. 16
- C. 32
- D. 96

7. My brother had \$15 as daily pocket money in July on average. How much pocket money did he have altogether in July?

- A. \$465
- B. \$450
- C. \$435
- D. \$420

7. 弟弟在七月份平均每天有\$15零用錢，他在七月份共有零用錢多少？

- A. \$465
- B. \$450
- C. \$435
- D. \$420

8. 1, 2, 6 are used to form the largest 3-digit number which is a multiple of 6. Each number should not be used repeatedly. What is the H.C.F. of that 3-digit number and 90?

- A. 30
- B. 18
- C. 15
- D. 6

8. 用1、2、6組成一個最大的三位數，且該數是6的倍數，每個數字不可重複使用。這三位數和90的H.C.F.是多少？

- A. 30
- B. 18
- C. 15
- D. 6

9. Which of the following numbers is closest to 1?

- A. 1.2
- B. $\frac{4}{5}$
- C. 0.85
- D. $1\frac{3}{25}$

9. 下列哪一個數最接近1?

- A. 1.2
- B. $\frac{4}{5}$
- C. 0.85
- D. $1\frac{3}{25}$

10. Half of a dozen of earrings weigh 38.4g altogether. What is the average weight of each earring?

- A. 6.4g
- B. 6.6g
- C. 12.2g
- D. 12.8g

10. 半打耳環共重 38.4g，平均每隻耳環的重量是多少?

- A. 6.4g
- B. 6.6g
- C. 12.2g
- D. 12.8g

11. Kate measured her weight and the reading of the measuring tool was 30.60kg. For the reading 30.60, which place values of '0' can be deleted?

- I. units
 - II. tenths
 - III. hundredths
- A. I only
 - B. II only
 - C. III only
 - D. I and III only

11. 敏如在健身室量度體重，該量度工具顯示其讀數為 30.60kg。在 30.60 這個讀數中，哪些位值的「0」可被刪掉?

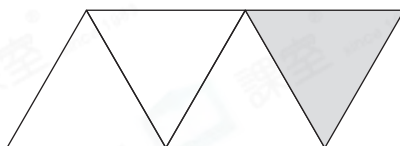
- I. 個位
 - II. 十分位
 - III. 百分位
- A. 只有 I
 - B. 只有 II
 - C. 只有 III
 - D. 只有 I 及 III

12. 168 students join a tour. 37.5% of them are girls. How many girls less than boys are there?

- A. 21
- B. 42
- C. 63
- D. 105

12. 有 168 名學生參加旅行，女生佔 37.5%，女生比男生少幾名？

- A. 21
- B. 42
- C. 63
- D. 105



13. The above figure is formed by four equilateral triangles of the same size. By what percentage of the whole figure is the shaded part less than the white part?

- A. 75%
- B. 50%
- C. $33\frac{1}{3}\%$
- D. 25%

13. 上圖是由四個大小相同的等邊三角形拼砌而成，陰影部分比白色部分少佔全圖的百分之幾？

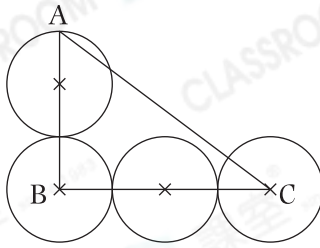
- A. 75%
- B. 50%
- C. $33\frac{1}{3}\%$
- D. 25%

14. Jane has savings of \$82.8. Her savings was 1.5 times of Winnie's. How much did they have altogether?

- A. \$27.6
- B. \$55.2
- C. \$138
- D. \$207

14. 慧茹有儲蓄 \$82.8，她的儲蓄恰好是夢瑤的 1.5 倍，兩人共有儲蓄多少？

- A. \$27.6
- B. \$55.2
- C. \$138
- D. \$207

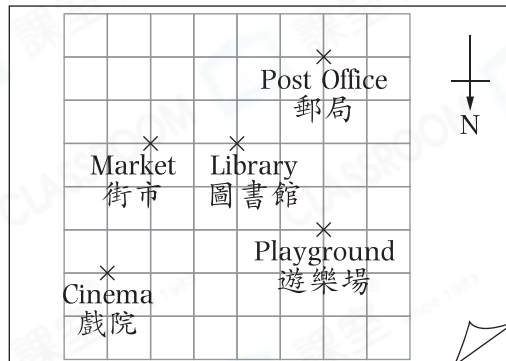


15. The above figure shows four circles of the same size. If AC is 15cm and the perimeter of triangle ABC is 36cm, what is the radius of each circle?

- A. 1cm
- B. 2cm
- C. 3cm
- D. 7cm

15. 上圖有四個大小相同的圓。如果 AC 長 15cm，而三角形 ABC 的周界是 36cm，每個圓的半徑是多少？

- A. 1cm
- B. 2cm
- C. 3cm
- D. 7cm



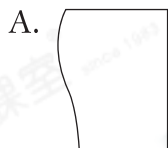
16. The above shows a treasure map. If the library is in the southwest of the treasure, in which of the following places could the treasure be found?

- A. Market
- B. Post Office
- C. Cinema
- D. Playground

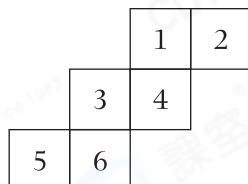
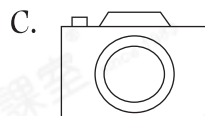
16. 上圖是一幅藏寶圖。如果圖書館在寶藏的西南方，下列哪一個地方可能是寶藏的位置？

- A. 街市
- B. 郵局
- C. 戲院
- D. 遊樂場

17. Which of the following figures is symmetrical?



17. 下列哪一個圖形是對稱圖形？



18. The above is a net of cubic box. When it is folded into a box, the face with the number '2' is the bottom of the box. Which number is marked at the top of the box?

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

18. 上圖是一個正方體盒子的摺紙圖樣。當把它摺成盒子後，摺紙圖樣中寫上數字「2」的一面是盒子的底部，那麼它的頂部是寫上哪一個數字？

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

19. Sam is at 30m west of Candy and May is at 30m south of Candy. What is the direction of May from Sam?

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

19. 志森在安琪的西面 30m，美美在安琪的南面 30m。美美在志森的哪一方？

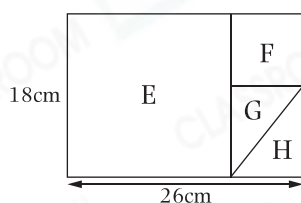
- A. 東南
- B. 西南
- C. 東北
- D. 西北

20. Draw a circle inside a square of perimeter 56cm. What is the longest circumference of the circle? (Take π as $\frac{22}{7}$)

- A. 22cm
- B. 44cm
- C. 50cm
- D. 72cm

20. 在一個周界是 56cm 的正方形內畫一個圓，圓的圓周最長是多少？(取 π 為 $\frac{22}{7}$)

- A. 22cm
- B. 44cm
- C. 50cm
- D. 72cm



21. In the above figure, E and F are squares. Find the area of H.

- A. 80cm^2
- B. 72cm^2
- C. 64cm^2
- D. 40cm^2

21. 在上圖，E和F是正方形。求H的面積。

- A. 80cm^2
- B. 72cm^2
- C. 64cm^2
- D. 40cm^2

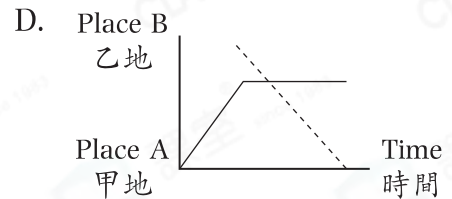
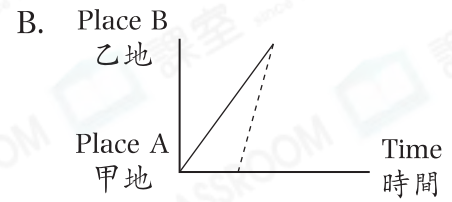
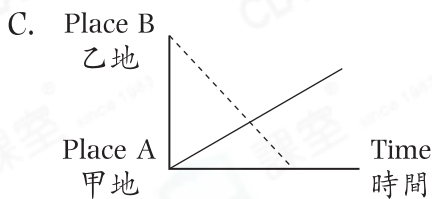
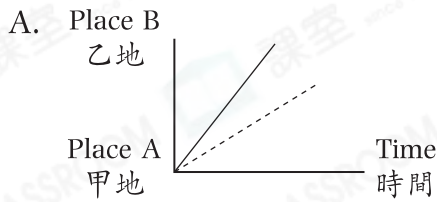
22. When Amy went to school, she took 16 minutes to walk 1.2km. She then ran 420m at twice of her walking speed. How long did she run?

- A. 21.6 minutes
- B. 10.8 minutes
- C. 5.6 minutes
- D. 2.8 minutes

22. 當淑儀上學時，她用了 16 分鐘步行了 1.2km。然後她以步行速率的 2 倍跑完 420m。她在上學途中跑了多久？

- A. 21.6 分鐘
- B. 10.8 分鐘
- C. 5.6 分鐘
- D. 2.8 分鐘

23. Which of the following travel graphs represents the two cars departing at the same time but from different places?



23. 下列哪一個行程圖表示兩車在同一時間但不同地開出？

24. Eva walked along a 400m track for 1.5 laps. If her average speed was 1.6m/s, how long did she walk for?

- A. 3 minutes and 75 seconds
- B. 4 minutes and 15 seconds
- C. 6 minutes and 15 seconds
- D. 6 minutes and 25 seconds

24. 綺華沿着400m跑道走了1.5圈。如果她的平均速率是1.6m/s，她共走了多久？

- A. 3分鐘75秒
- B. 4分鐘15秒
- C. 6分鐘15秒
- D. 6分鐘25秒

25. There were originally 10 members in the swimming team. Their average height was 176cm. After James quits the team, their average height is 175cm. How tall is James?

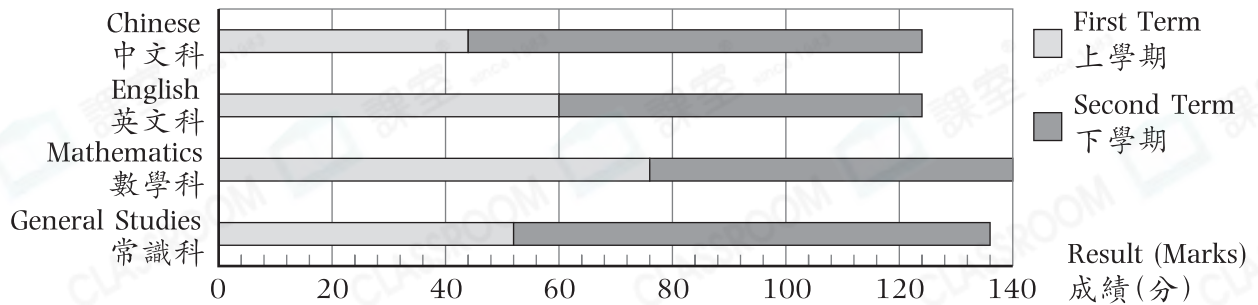
- A. 165cm
- B. 175cm
- C. 176cm
- D. 185cm

25. 游泳隊原有10名隊員，他們的平均身高是176cm。振偉退出游泳隊後，隊員的平均身高是175cm。振偉的身高是多少？

- A. 165cm
- B. 175cm
- C. 176cm
- D. 185cm

Jimmy's Examination Results in the First and Second Terms

占美上、下學期的考試成績



26. Which subject does Jimmy get the greatest improvement?

- A. Chinese
- B. English
- C. Mathematics
- D. General Studies

26. 占美哪一科的成績進步最大？

- A. 中文科
- B. 英文科
- C. 數學科
- D. 常識科

27. Miss Fung wants to show the examination results of four students in two subjects by graphs. Which of the following is/are the suitable graph(s) that she should use?

- I. Pie Chart
 - II. Bar Chart
 - III. Compound Bar Chart
- A. III only
 - B. I and II only
 - C. II and III only
 - D. I, II and III

27. 馮老師想用統計圖來表示四名學生在兩科考試中取得的成績。她選用下列哪一/哪幾種統計圖較適當？

- I. 圓形圖
 - II. 棒形圖
 - III. 複合棒形圖
- A. 只有 III
 - B. 只有 I 和 II
 - C. 只有 II 和 III
 - D. I、II 和 III

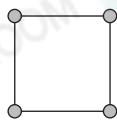


Figure 1

圖一

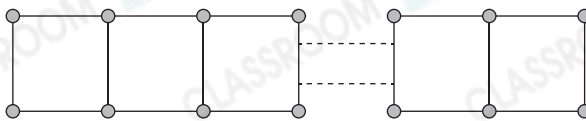


Figure 2

圖二

28. In Figure 1, a square has 4 points. If n squares are put together as shown in Figure 2, how many points are there?

- A. $2(n + 1)$
- B. $2(n + 2)$
- C. $2n + 1$
- D. $2n$

28. 在圖一中，一個正方形有4個點。若把 n 個正方形拼合起來如圖二所示，共有點多少個？

- A. $2(n + 1)$
- B. $2(n + 2)$
- C. $2n + 1$
- D. $2n$

29. My father weighs y kg. His weight is twice of my sister's. My mother is 33kg heavier than my sister. What is the weight of my mother?

- A. $(2y + 33)$ kg
- B. $(2y - 33)$ kg
- C. $\frac{y + 33}{2}$ kg
- D. $(\frac{y}{2} + 33)$ kg

29. 爸爸重 y kg，他的體重是妹妹的兩倍，媽媽比妹妹重33kg，媽媽的體重是多少？

- A. $(2y + 33)$ kg
- B. $(2y - 33)$ kg
- C. $\frac{y + 33}{2}$ kg
- D. $(\frac{y}{2} + 33)$ kg

30. If $0.6x - 12 = 75$, then $x = ?$

- A. 37.8
- B. 52.2
- C. 105
- D. 145

30. 如果 $0.6x - 12 = 75$ ，那麼 $x = ?$

- A. 37.8
- B. 52.2
- C. 105
- D. 145

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)

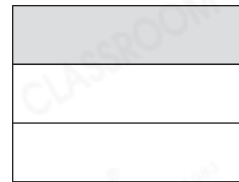
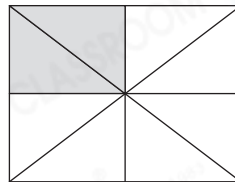
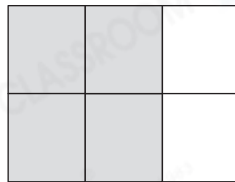
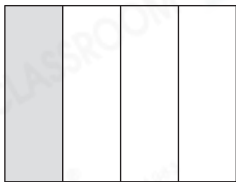
除特別指明外，在回答本部問題時，須列出計算步驟。

31. Car P and Q departed from the same place at the same time. They travelled in opposite directions at a speed of 50km/h and 60km/h respectively. What was the distance between the two cars after 3 hours?
[4 marks]

31. 汽車P和汽車Q在某地同時出發，分別以50km/h和60km/h的平均速率背向而行，3小時後，兩車相距多遠？
[4分]

32. Jackson bought four packs of rectangle craft papers of the same size. He cut four pieces of them into equal portions by different methods as shown below.

32. 景東買了四包長方形手工紙，它們都大小相同。他用不同的方法等分其中四張，如下圖所示。

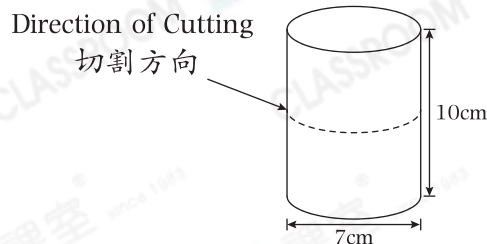


- (a) The shaded part shows the craft papers used by Jackson. How many pieces of craft papers did he use? (Give the answer only)
[2 marks]

- (a) 陰影部分表示景東用去的手工紙，他共用去手工紙多少張？(只須寫出答案) [2分]

- (b) The original price of each pack of craft papers was \$28 and the special price is 90% of it. Jackson bought craft papers at the special price, how much did he save in total?
[4 marks]

- (b) 每包手工紙的原價是\$28，特價是原價的90%。景東以特價購買手工紙，他共節省了多少？
[4分]

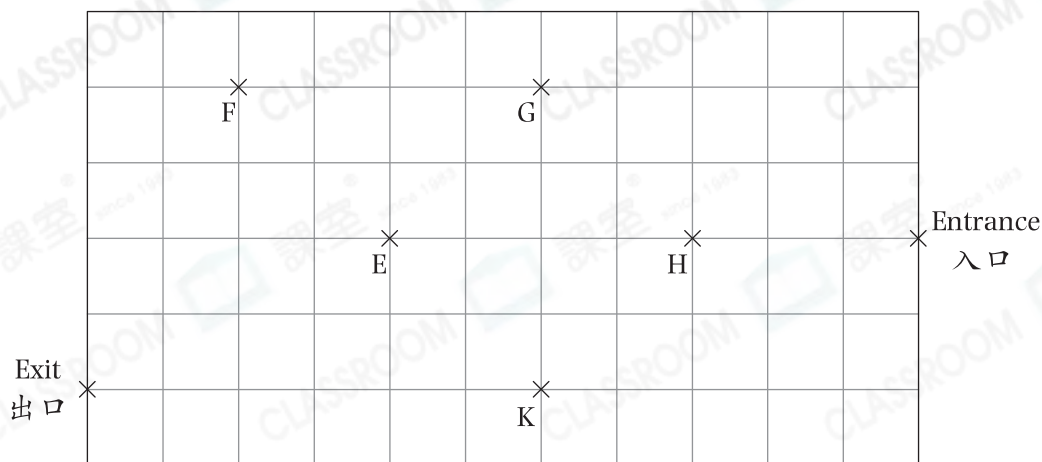


- 33.** (a) If a cylinder is cut horizontally along the dotted line as shown above, what is the shape of the cut section? (Give the answer only) [2 marks]
- (b) What is the perimeter of the cut section in part (a)? (Take π as $\frac{22}{7}$) [4 marks]

- 33.** (a) 如果把圓柱沿虛線水平切割，如上圖所示，切割出來截面是什麼形狀？(只須寫出答案) [2分]
- (b) 根據(a)部分，切割出來截面的周界是多少？(取 π 為 $\frac{22}{7}$) [4分]

- 34.** There is a rectangular container of 16cm long, 5cm wide and 14cm high.
- (a) 1L of water is poured into the container. What is the height of water in the container? [4 marks]
- (b) Fiona puts 16 marbles of the same size into the water and the water level in the container rises by 0.8cm. What is the volume of each marble? [4 marks]

- 34.** 有一個長方體的容器，長16cm，闊5cm，高14cm。
- (a) 把1L的水倒進這容器中，水的高度是多少？ [4分]
- (b) 小蘭把16粒大小相同的波子放入水中，容器中的水位升高了0.8cm。每粒波子的體積是多少？ [4分]



35. The above is the floor plan of the shopping mall. Miss Wong is the owner of shop K. She put 160 bicycles for sale and $\frac{3}{5}$ of them were children's bicycles.

(a) Shop H is in the north of Entrance. What is the direction of Miss Wong's shop from shop E? (Give the answer only)
[2 marks]

(b) In Miss Wong's shop, $\frac{1}{6}$ of the children's bicycles were blue. How many children's bicycles were blue? (Give the answer only)
[2 marks]

(c) Each adult's bicycle costs \$380. If all the adult's bicycles were sold, how much would Miss Wong get?
[4 marks]

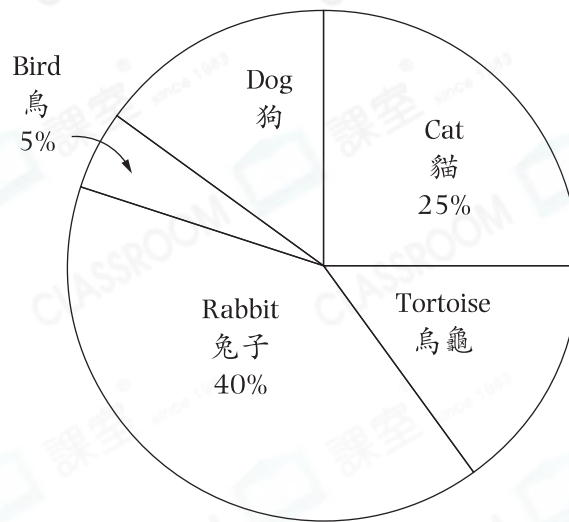
35. 上圖是商場的平面圖。黃小姐是店鋪K的店主。她在店鋪內擺放了160部單車售賣，其中 $\frac{3}{5}$ 是小童單車。

(a) 店鋪H在入口的北方。黃小姐的店鋪在店鋪E的哪一方？(只須寫出答案) [2分]

(b) 黃小姐售賣的小童單車中， $\frac{1}{6}$ 是藍色的。藍色的小童單車有多少輛？(只須寫出答案) [2分]

(c) 每輛成人單車的售價是\$380。如果售出所有成人單車，黃小姐可得款項多少？ [4分]

Number of Pets in the Pet Shop
寵物店寵物的數量



36. The above chart shows the number of pets in the pet shop.

- (a) The number of dogs is equal to that of tortoises. What percentage of all the pets are dogs? [4 marks]
- (b) There are x pets in the pet shop. If the shop owner buys another 12 cats, there will be 32 cats in total. How many pets are there in the pet shop? (Use equation to solve the problem and show your working) [4 marks]

36. 上圖顯示寵物店中寵物的數量。

- (a) 狗的數量和烏龜的相同。狗的數量佔全部寵物的百分之幾? [4分]
- (b) 寵物店有 x 隻寵物，如果店主再購入12隻貓，該店共有32隻貓。寵物店有寵物多少隻? (須用方程列式計算) [4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	1-14	15-19	20-24	25-27	28-30
	Marks 分數					
Section B 乙部	31					
	32(a)					
	32(b)					
	33(a)					
	33(b)					
	34(a)					
	34(b)					
	35(a)					
	35(b)					
	35(c)					
	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	Marks 得分
31		4	<input type="text"/>
32(a)	He used _____ pieces of craft papers. 他共用去_____張手工紙。	2	<input type="text"/>
32(b)		4	<input type="text"/>
33(a)	The shape of the cut section is _____ . 切割出來截面是_____。	2	<input type="text"/>

Go On To Next Page
轉下頁續答

Marks
估分

Marks
得分

33(b)

4

34(a)

4

34(b)

4

35(a)

Miss Wong's shop is in the _____ of shop E.
黃小姐的店舖在店舖E的_____方。

2

Go On To Next Page
轉下頁續答

Marks
估分

Marks
得分

35(b)

children's bicycles were blue.

藍色的小童單車有_____輛。

2

35(c)

4

36(a)

4

36(b)

4

END
完