

Mathematics

數學

Mock Paper 3

模擬試卷(三)

六年級下學期上半部分

題號	學習重點	範疇	題號	學習重點	範疇
1	多位數(5上)	數	23	速率(6下)	度量
2	整數乘法(4上)		24	行程圖(6下)	
3	倍數(4上)		25	速率(6下)	
4	分數、小數和百分數的大小比較(6上)		26	複合棒形圖(5上)	數據處理
5	整數乘法(4上)		27	棒形圖(3下)、圓形圖(6下)	
6	整數除法(4上)		28	平均數(6上)	代數
7	分數和百分數的互化(6上)		29	代數式(5下)	
8	百分數的認識(6上)		30	簡易方程(5下)	
9	分數和小數的大小比較(6上)		數	31(a)	百分數的應用(6上)
10	百分數的應用(6上)			31(b)	百分數的應用(6上)
11	小數四則混合計算(6上)		度量	32(a)	角和度(6下)
12	四邊形的特性(4上)	32(b)		角和度(6下)	
13	圖形拼砌(4上)	33(a)		速率(6下)	
14	圓的認識(5下)、周界(4下)	圖形與空間	33(b)	速率(6下)	
15	八個方向(4上)		34(a)	八個方向(4上)	
16	面積(4下)、周界(4下)	數	34(b)	分數乘法(5上)	
17	圓周(6上)		34(c)	分數四則混合計算(5下)	
18	摺紙圖樣(5下)、面積(4下)		35(a)	圓形圖(6下)	
19	體積(5下)、圓的認識(5下)	數據處理	35(b)	圓形圖(6下)	
20	不規則立體的體積(6上)		36	簡易方程(5上)	
21	時間、角和度(6下)	代數	37(a)	行程圖(6下)	
22	速率(6下)		37(b)	行程圖(6下)	
		度量			

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 31-37
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37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)

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 total attendance of a department store last month is about 738 000 when corrected to the nearest thousand. Which of the following numbers can be the largest total attendance of the department store?

- A. 738 999
- B. 738 499
- C. 737 999
- D. 737 500

1. 取近似值至千位後，百貨商店上月的總入場人次約有 738 000。下列哪一個數可能是該總入場人次的最大值？

- A. 738 999
- B. 738 499
- C. 737 999
- D. 737 500

$$1 \blacktriangle 5$$

$$\times \quad 6 \star$$

2. Which of the following options can make the above expression to be the **smallest** and **odd**?

- A. $\blacktriangle = 0, \star = 1$
- B. $\blacktriangle = 1, \star = 0$
- C. $\blacktriangle = 2, \star = 1$
- D. $\blacktriangle = 2, \star = 2$

2. 下列哪一個選項能使以上算式得出一個最小的奇數？

- A. $\blacktriangle = 0, \star = 1$
- B. $\blacktriangle = 1, \star = 0$
- C. $\blacktriangle = 2, \star = 1$
- D. $\blacktriangle = 2, \star = 2$

3. What is the sum of the smallest and the greatest multiples of 23 between 70 and 200?

- A. 184
- B. 253
- C. 276
- D. 299

3. 在70至200之間，23的最小和最大的倍數之和是多少？

- A. 184
- B. 253
- C. 276
- D. 299

$\frac{1}{5}$

?

140%

4. Three number cards are arranged from the smallest to the greatest as shown above. Which of the following numbers should be in the middle?

- A. 1.38
- B. 1.45
- C. 115%
- D. 1.5

4. 如上圖所示，三張數字卡由小至大排列，下列哪一個是中間的數？

- A. 1.38
- B. 1.45
- C. 115%
- D. 1.5

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

- A. 9800
- B. 9898
- C. 9900
- D. 9999

5. 最小的三位奇數和最大的兩位偶數相乘的結果是多少？

- A. 9800
- B. 9898
- C. 9900
- D. 9999

6. The price of a cake is \$56. A reduction of \$98 is given to the purchase of a box of 14 cakes. By how much is a cake cheaper on average?

- A. \$4 B. \$7

6. 蛋糕每個的售價是\$56。現購買一盒共14個的蛋糕，可獲減價\$98，平均每個蛋糕便宜了多少？

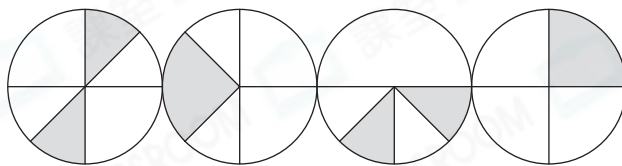
- C. \$40 D. \$42

7. Given that $\frac{1}{16}$ equals 6.25%, express $\frac{1}{1600}$ as a percentage.

- A. 0.0625%
B. 0.625%
C. 62.5%
D. 625%

7. 已知 $\frac{1}{16}$ 等於6.25%，把 $\frac{1}{1600}$ 寫成百分數。

- A. 0.0625%
B. 0.625%
C. 62.5%
D. 625%



8. The above figure is formed by 4 circles of the same size. What percentage of the whole figure is shaded?

- A. $\frac{1}{4}\%$
B. $\frac{3}{4}\%$
C. 25%
D. 75%

8. 上圖是由4個大小相同的圓組成，陰影部分佔全圖的百分之幾？

- A. $\frac{1}{4}\%$
B. $\frac{3}{4}\%$
C. 25%
D. 75%

9. Peter had a packet of nuts. He gave some nuts to Jack, Tony and Wilson, as shown in the table below.

9. 定邦有一包果仁，他把部分果仁分給克勤、偉東和海森，如下表所示：

	Jack 克勤	Tony 偉東	Wilson 海森
Nuts obtained 分得果仁	$\frac{3}{13}$ packet 包	0.3 packet 包	$\frac{1}{4}$ packet 包

Who got the largest amount of nuts?
Who got the smallest amount?

誰人分得果仁的份量最多？誰人分得最少？

- | | <u>Largest Amount</u> | <u>Smallest Amount</u> |
|----|-----------------------|------------------------|
| A. | Tony | Jack |
| B. | Wilson | Jack |
| C. | Tony | Wilson |
| D. | Wilson | Tony |

- | | <u>最多</u> | <u>最少</u> |
|----|-----------|-----------|
| A. | <u>偉東</u> | <u>克勤</u> |
| B. | <u>海森</u> | <u>克勤</u> |
| C. | <u>偉東</u> | <u>海森</u> |
| D. | <u>海森</u> | <u>偉東</u> |

10. There are 520 cows and sheep in a farm. 70% of them are cows. How many cows more than sheep are there?

10. 某農場有 520 頭牛和羊，牛佔 70%，牛比羊多多少頭？

- A. 156
B. 208
C. 312
D. 364

- A. 156
B. 208
C. 312
D. 364

11. Susan weighs 46.8kg. Her weight is 1.2 times of Helen's. By how much is Susan heavier than Helen?

- A. 56.16kg
- B. 39kg
- C. 9.36kg
- D. 7.8kg

11. 玉珊的體重是46.8kg，她的體重恰好是海霞的1.2倍，玉珊比海霞重多少？

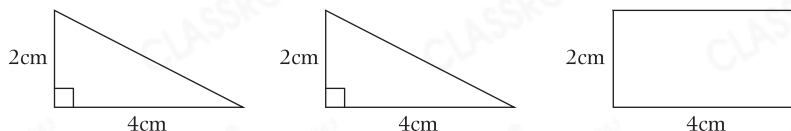
- A. 56.16kg
- B. 39kg
- C. 9.36kg
- D. 7.8kg

12. Which of the following is the common property of squares, rectangles and rhombuses?

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

12. 正方形、長方形和菱形有以下哪一種共同性質？

- A. 四邊相等
- B. 四角相等
- C. 最少有一個直角
- D. 對邊平行

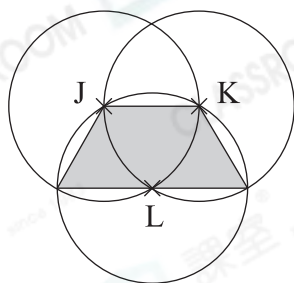


13. David has two pieces of triangular cardboards of the same size and one piece of rectangular cardboard as shown above. Which of the following figures **cannot** be made by fitting the three pieces of cardboards together?

- A. rhombus
- B. parallelogram
- C. rectangle
- D. triangle

13. 志明有兩塊大小相同的三角形及一塊長方形紙板，如上圖所示。下列哪一種圖形**不可**由這三塊紙板拼合出來？

- A. 菱形
- B. 平行四邊形
- C. 長方形
- D. 三角形



14. In the above figure, J, K and L are the centres of three circles of the same size. The diameter of each circle is 18cm. What is the perimeter of the shaded part?

- A. 90cm
- B. 54cm
- C. 45cm
- D. 36cm

14. 上圖中，J、K和L是三個大小相同的圓的圓心，每個圓的直徑是18cm，陰影部分的周界是多少？

- A. 90cm
- B. 54cm
- C. 45cm
- D. 36cm

15. David is 30m to the south of Louis. Steven is 30m to the west of David. In which direction is Louis from Steven?

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

15. 達文在立峰的南方30m，兆豐在達文的西方30m，立峰在兆豐的哪一方？

- A. 東南
- B. 東北
- C. 西南
- D. 西北

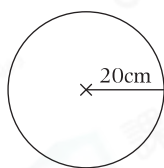


16. The above figure is formed by 15 squares of the same size. The area of each square is 36cm^2 . What is the perimeter of the above figure?

- A. 90cm
- B. 96cm
- C. 170cm
- D. 450cm

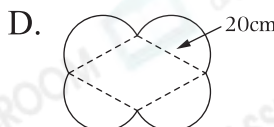
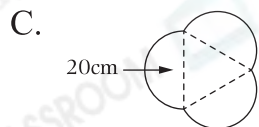
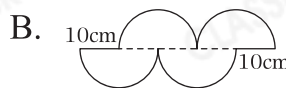
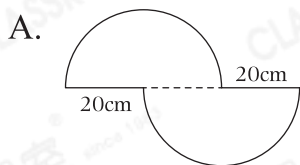
16. 上圖是由15個大小相同的正方形組成，而每個正方形的面積是 36cm^2 。以上圖形的周界是多少？

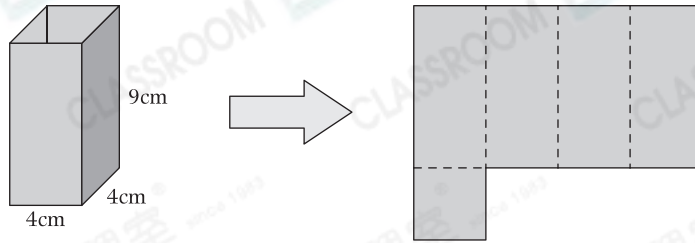
- A. 90cm
- B. 96cm
- C. 170cm
- D. 450cm



17. The radius of the above circle is 20cm. Each of the following figures is formed by putting some semi-circles or a figure of side 20cm long and semi-circles together. Which figure below has the same perimeter as the circumference of the circle above?

17. 上圖圓的半徑是20cm。以下各圖形是由一些半圓或由邊長20cm的圖形和半圓拼砌而成，哪一個圖形的周界與上圖的圓周相同？





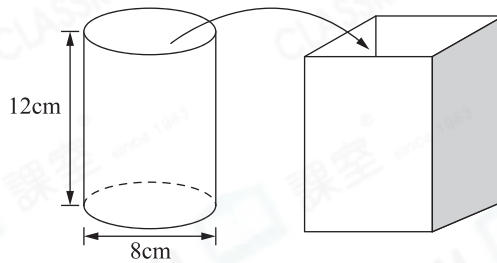
18. A cardboard box without lid is unfolded, as shown above. What is the area of the cardboard?

- A. 176cm^2
- B. 164cm^2
- C. 160cm^2
- D. 144cm^2

18. 如上圖所示，將一個無蓋卡紙盒展開。卡紙的面積是多少？

- A. 176cm^2
- B. 164cm^2
- C. 160cm^2
- D. 144cm^2

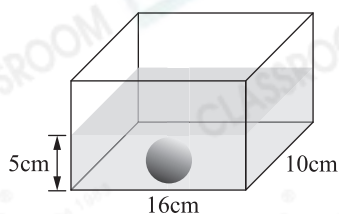
19. A cylindrical model is just fit when being put into a rectangular box, as shown below. What is the least volume of the box?



- A. 64cm^3
- B. 512cm^3
- C. 603cm^3
- D. 768cm^3

19. 一個圓柱模型剛好可以放進一個長方體盒子內，如下圖所示。這個長方體盒子的體積最小是多少？

- A. 64cm^3
- B. 512cm^3
- C. 603cm^3
- D. 768cm^3



20. After Amy took out the iron ball from the container show in the above figure, the water level dropped by 0.3cm. What was the volume of the iron ball?

- A. 48cm^3
- B. 752cm^3
- C. 800cm^3
- D. 848cm^3

20. 曉玲從上圖的容器內取出鐵球後，水位下降了0.3cm。這鐵球的體積是多少？

- A. 48cm^3
- B. 752cm^3
- C. 800cm^3
- D. 848cm^3

21. The time is 11:30a.m. now. What is the size of the smaller angle formed by the hour hand and the minute hand on the clock after 90 minutes?

- A. 30°
- B. 60°
- C. 90°
- D. 135°

21. 現在是11:30a.m.，90分鐘後，鐘面上時針和分針形成較小的角的大小是多少？

- A. 30°
- B. 60°
- C. 90°
- D. 135°

22. Mabel ran 450m in 2.5 minutes. What was her average speed?

- A. 1.8m/s
- B. 3m/s
- C. 3.5m/s
- D. 4m/s

22. 美儀用了2.5分鐘跑完450m，她的平均速率是多少？

- A. 1.8m/s
- B. 3m/s
- C. 3.5m/s
- D. 4m/s

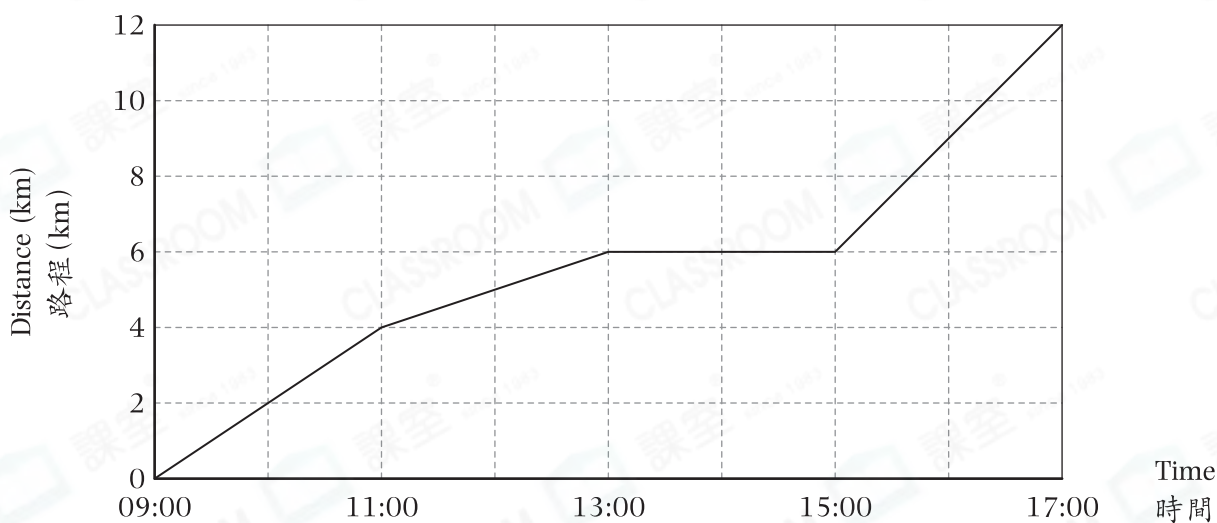
23. Each lap of the running track is 400m long. Frankie ran $2\frac{1}{10}$ laps at the running track with an average speed of 2.4m/s. How much time did he use?

- A. 167 seconds
- B. 350 seconds
- C. 457 seconds
- D. 2016 seconds

23. 緩跑徑每圈長400m。兆基以2.4m/s的平均速率在該緩跑徑跑了 $2\frac{1}{10}$ 個圈。他用了多少時間？

- A. 167 秒
- B. 350 秒
- C. 457 秒
- D. 2016 秒

Travel Graph of Mr Chow
周先生的行程圖



24. According to the above graph, in which period did Mr Chow walk the fastest?

- A. 09:00 – 11:00
- B. 11:00 – 13:00
- C. 13:00 – 15:00
- D. 15:00 – 17:00

24. 根據上圖，周先生在哪一段時間走得最快？

- A. 09:00 – 11:00
- B. 11:00 – 13:00
- C. 13:00 – 15:00
- D. 15:00 – 17:00

25. City M and City N are 200km apart. My uncle drove from City M to City N at 8:10a.m. at an average speed of 80km/h. When did he arrive at City N?

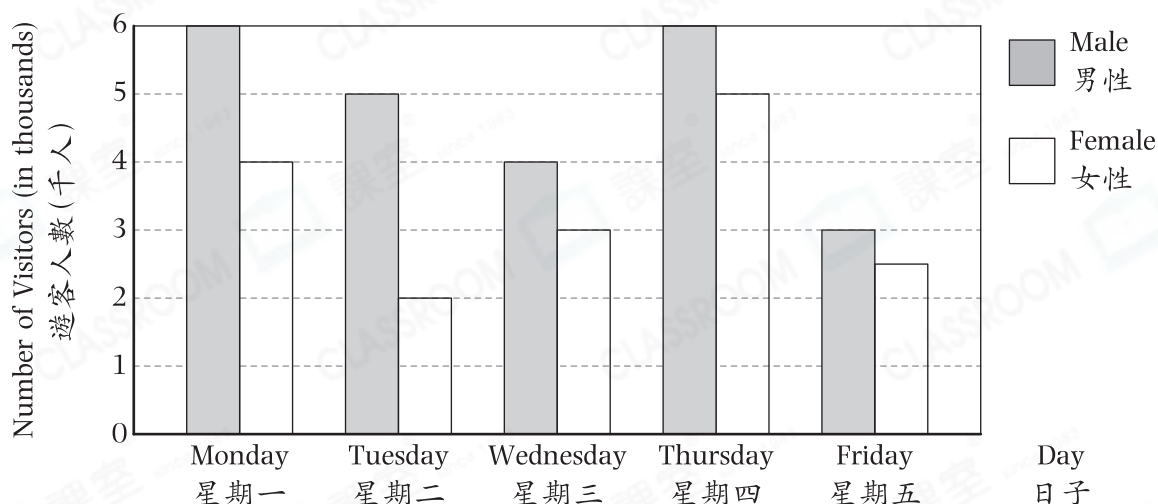
- A. 10:10a.m.
- B. 10:30a.m.
- C. 10:40a.m.
- D. 11:10a.m.

25. M城和N城相距200km。叔叔在8:10a.m. 駕車從M城出發，以80km/h的平均速率前往N城，他在什麼時候到達N城？

- A. 10:10a.m.
- B. 10:30a.m.
- C. 10:40a.m.
- D. 11:10a.m.

The Number of Visitors to the Panda Park in the Past Five Days

熊貓樂園過去五天的遊客人數



26. According to the above graph, which day's total number of visitors was exactly 2 times the total number of visitors on Friday?

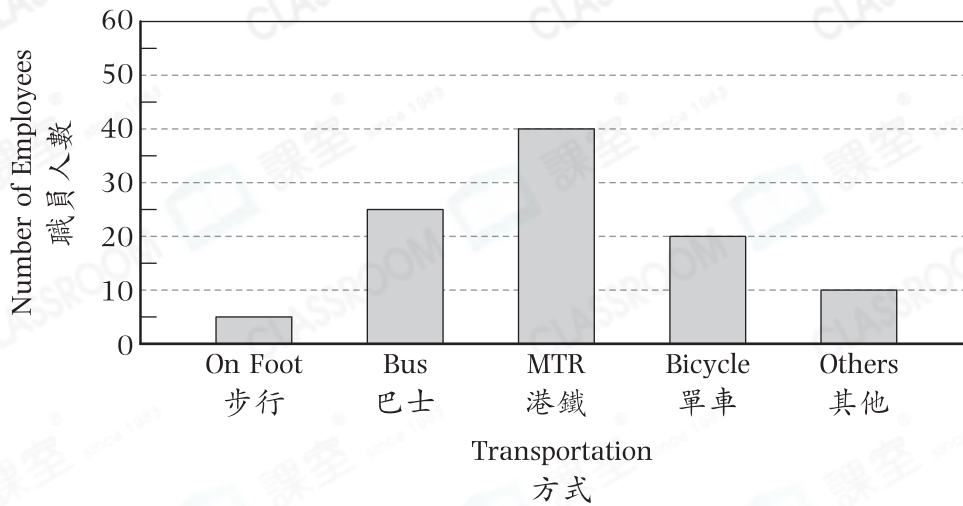
- A. Monday
- B. Tuesday
- C. Wednesday
- D. Thursday

26. 根據上圖，哪一天的總遊客人數剛好是星期五的2倍？

- A. 星期一
- B. 星期二
- C. 星期三
- D. 星期四

Transportation to Office Taken by Employees

職員的上班方式

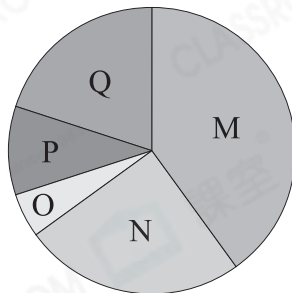


27. The graph above shows the transportation to office taken by employees in a company. Mandy converted the bar chart into a pie chart (as shown below).

27. 上圖顯示某公司職員的上班方式。明珍把這個棒形圖改畫成圓形圖(如下圖所示)。

Transportation to Office Taken by Employees

職員的上班方式



In the pie chart, which transportation does N represent? What is the percentage of employees taking it?

- A. On foot, 5%
- B. Bus, 25%
- C. MTR, 40%
- D. Bicycle, 20%

在圓形圖中，N代表哪種上班方式？以這種方式上班的職員佔全部職員的百分之幾？

- A. 步行，5%
- B. 巴士，25%
- C. 港鐵，40%
- D. 單車，20%

28. When Gigi calculated the average value of ten numbers, she mistakenly took one of the numbers 5.5 as 55 and got the wrong answer 20. What is the correct answer?

- A. 150.5
- B. 16.5
- C. 15.5
- D. 15.05

28. 嘉妮在計算十個數的平均值時，誤把其中的5.5當成55計算，得出20這個錯誤答案。正確的答案是多少？

- A. 150.5
- B. 16.5
- C. 15.5
- D. 15.05

29. The regular ticket price of the concert is $\$K$ each. The organiser holds a special price offer of 'For buying five tickets, the fifth ticket costs $\$210$ only.' Jeff and 4 friends buy the tickets together, and each of them need one ticket. How much does each of them pay on average?

- A. $\$ \frac{4K + 210}{5}$ B. $\$ \frac{5K + 210}{4}$ C. $\$ \frac{4K - 210}{5}$ D. $\$ \frac{5K - 210}{4}$

29. 演唱會門票正價為每張 $\$K$ ，主辦方現提供「購買五張，第五張只須付 $\$210$ 」的購票優惠。俊傑和4位朋友一起購票，每人各需一張。他們平均每人須付款多少？

30. If $\frac{M}{3} + 1 = 3$, then $M + 3 = ?$

- A. 1
- B. 3
- C. 6
- D. 9

30. 如果 $\frac{M}{3} + 1 = 3$ ，那麼 $M + 3 = ?$

- A. 1
- B. 3
- C. 6
- D. 9

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 following shows the number of students joining the study tours in primary 6. Each student could only join one study tour.

31. 以下是六年級報名參加遊學團的學生人數，每名學生只能參加一個遊學團。

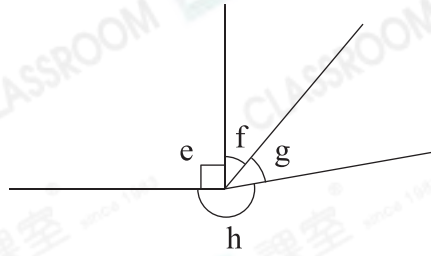
Country 國家	Sweden 瑞典	Italy 意大利	Germany 德國	Singapore 新加坡
Number of Students 學生人數	21	48	36	45

(a) What percentage of students is in the Italy Study Tour? (Give the answer only) [2 marks]

(a) 參加意大利遊學團的學生佔總人數的百分之幾？(只須寫出答案) [2分]

(b) Moni believes that if each study tour has 15 more students joined in, there will be no change in the percentage of the number of students in the Italy Study Tour. Do you agree with her? Explain. [4 marks]

(b) 明夏認為若每個遊學團都增加15名學生，意大利遊學團的學生人數的百分數並沒有改變，你同意嗎？試解釋。 [4分]



32. A round angle is divided into four angles, as shown above.

(a) In the above figure, which angle is a reflex angle? (Give your answer only) [2 marks]

(b) If $\angle f = \angle g$, $\angle h = 190^\circ$, what is the size of $\angle f$? (Give your answer only) [2 marks]

32. 把一個周角分成四個角，如上圖所示。

(a) 上圖中，哪個角是反角？（只須寫出答案） [2分]

(b) 如果 $\angle f = \angle g$ ， $\angle h = 190^\circ$ ， $\angle f$ 的大小是多少？（只須寫出答案） [2分]

33. Every Sunday, Martin has to reach the church at 8:50a.m. for a meeting.

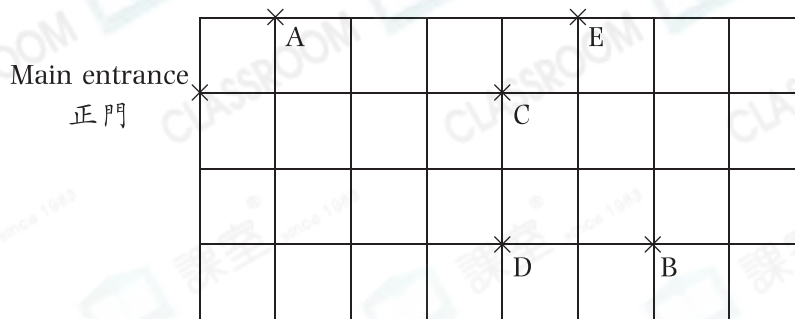
(a) Last Sunday, he cycled from his home to the church at 8:25a.m. at an average speed of 15km/h. He was late for 15 minutes. What was the distance between his home and the church? (Give the answer only) [2 marks]

(b) If Martin needed to reach the church at 8:50a.m., what should be his average cycling speed? [4 marks]

33. 每個星期日，德林要在8:50a.m.到達教會參加聚會。

(a) 上星期日，他於8:25a.m.從家以15km/h的平均速率騎單車到教會，結果他遲到了15分鐘。他從家到教會的路程是多少？（只須寫出答案） [2分]

(b) 如果德林要在8:50a.m.到達教會，他騎單車的平均速率應是多少？ [4分]



34. The above figure is the floor plan of the mall. Miss Chan ran a clothing store in Area C. She put 240 shirts in the store for sell. $\frac{5}{8}$ of them were ladies' shirts.

(a) Area A is in the southwest of the main entrance. What is the direction of Miss Chan's store from Area B? (Give the answer only) [2 marks]

(b) In Miss Chan's store, $\frac{1}{6}$ of ladies' shirts were girls' shirts. How many girls' shirts were there? (Give the answer only) [2 marks]

(c) To promote the sales of men's shirts, Miss Chan marked the price of all men's shirts at \$95 each. If all the men's shirts were sold, how much would she get? [4 marks]

34. 上圖是商場的平面圖。陳小姐經營的服裝店在區域C。她在店內擺了240件襯衫售賣，其中 $\frac{5}{8}$ 是女裝襯衫。

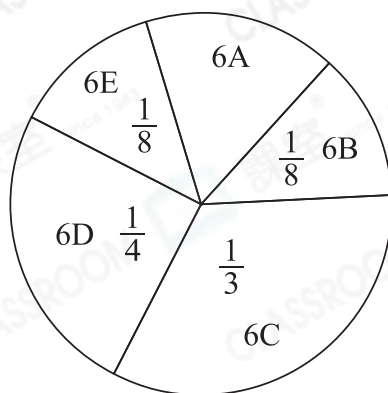
(a) 區域A在正門的西南方。陳小姐的服裝店在區域B的哪一方？(只須寫出答案) [2分]

(b) 陳小姐售賣的女裝襯衫中，有 $\frac{1}{6}$ 是女童襯衫。女童襯衫共有多少件？(只須寫出答案) [2分]

(c) 為了促銷襯衫，陳小姐把所有男裝襯衫定價為每件\$95。如果她售出全部男裝襯衫，可得款項多少？ [4分]

Best Performance Class in the Talent Show

才藝表演中表現最佳的班別



35. By the one-student-one-vote scheme, 480 students voted for the best performance class in the talent show and the result was given above.

(a) How many students voted for Class 6B? (Give the answer only) [2 marks]

(b) What fraction of the students voted for Class 6A? [4 marks]

35. 480名學生以一人一票的方式選出才藝表演中表現最佳的班別，結果如上。

(a) 投票給6B班的學生共有多少名？（只須寫出答案） [2分]

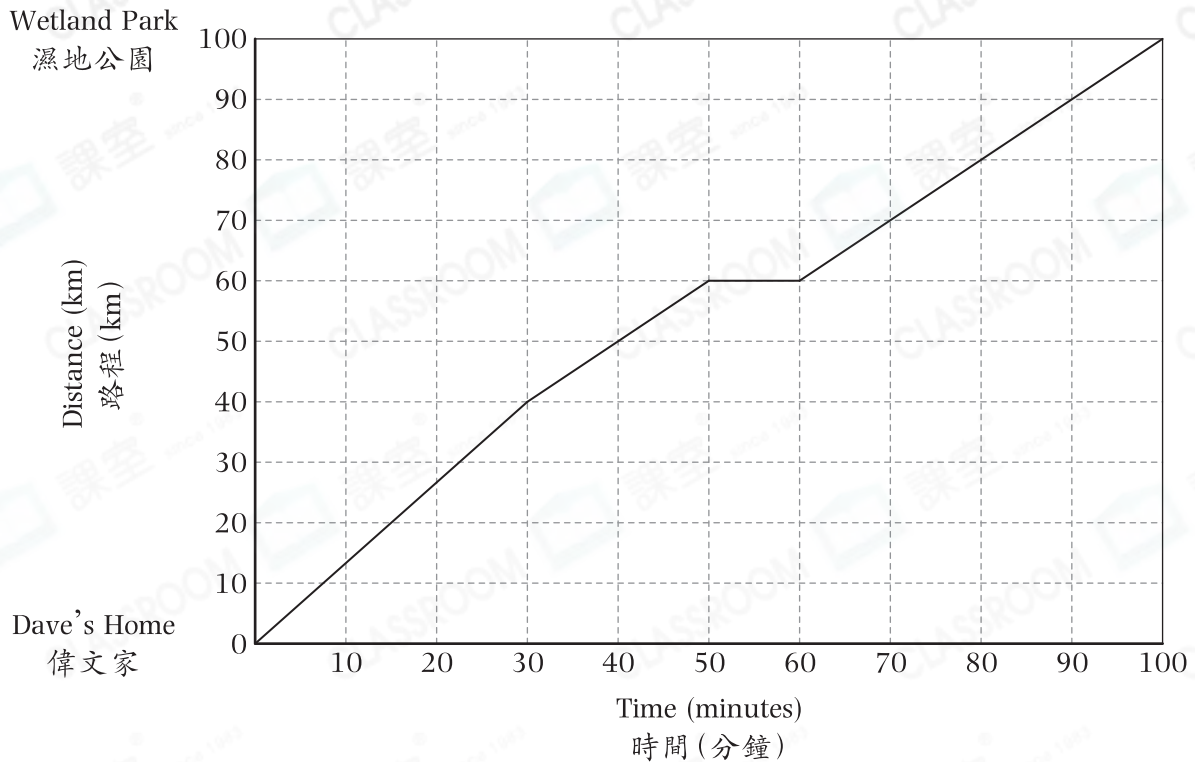
(b) 投票給6A班的學生佔全部投票學生的幾分之幾？ [4分]

36. My mother bought a packet of candies and shared the candies among her 3 children evenly. If each child got 16 candies, how many candies were there in the packet? (Use equation to solve the problem and show your working) [4 marks]

36. 媽媽買了一包糖果，並把糖果平均分給3位子女，如果每位子女分得16顆糖果，一包糖果有多少顆？（須用方程列式計算） [4分]

Travel Graph of Dave

偉文的行程圖



37. Dave drove his car to the Wetland Park from home.

(a) Dave started his journey at 11:45a.m. According to the travel graph of Dave, when did he arrive at the Wetland Park? (Give the answer only) [2 marks]

(b) What was Dave's average speed for the whole journey in kilometres per hour? [4 marks]

37. 偉文駕車從家中出發前往濕地公園。

(a) 偉文在11:45a.m.駕車出發。根據偉文的行程圖，他在何時抵達濕地公園？(只須寫出答案) [2分]

(b) 偉文全程的平均速率是每小時多少公里？ [4分]

End of Test Paper

測驗卷完

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	1-11	12-15	16-25	26-28	29-30
	Marks 分數					
Section B 乙部	31(a)					
	31(b)					
	32(a)					
	32(b)					
	33(a)					
	33(b)					
	34(a)					
	34(b)					
	34(c)					
	35(a)					
	35(b)					
	36					
37(a)						
37(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
<p>31(a). The percentage is _____ . 參加<u>意大利</u>遊學團的學生佔總人數的_____。</p>	2	<input type="text"/>
<p>31(b). Because _____ 因為 _____</p> <p>* Agree / Disagree (* Circle the correct answer) * 同意 / 不同意 (* 圈出正確的答案)</p>	4	<input type="text"/>
<p>32(a). _____ is a reflex angle. _____是反角。</p>	2	<input type="text"/>
<p>32(b). $\angle f$ is _____ . $\angle f$ 的大小是_____。</p>	2	<input type="text"/>
<p>33(a). The distance was _____ . (Give your answer with a unit) 路程是_____。(答案須寫上單位)</p>	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).

Miss Chan's store is in the _____ of Area B.
陳小姐的服裝店在區域B的_____方。

2

34(b).

There were _____ girls' shirts.
女童襯衫共有_____件。

2

34(c).

4

35(a).

The number of students voted for Class 6B was _____.
投票給6B班的學生共有_____名。

2

Go On To Next Page

轉下頁續答

Marks
估分

Marks
得分

35(b).

4

36.

4

37(a).

He arrived at the Wetland Park at _____.

他在_____抵達濕地公園。

2

37(b).

4

END
完