新加坡福建会馆属下五校小六统一考试
道南 • 爱同 • 崇福 • 南侨 • 光华

SINGAPORE HOKKIEN HUAY KUAN
5-SCHOOL COMBINED PRIMARY 6 PRELIMINARY EXAMINATIONS
TAO NAN • AI TONG • CHONGFU • NAN CHIAU • KONG HWA

2013
数学 MATHEMATICS
PAPER 1
BOOKLET A

Date : 23 August 2013
Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

√ Do not open this booklet until you are told to do so.
√ Follow all instructions carefully.
√ Answer all questions.
√ Shade your answers in the Optical Answer Sheet (OAS) provided
√ You are not allowed to use a calculator.

This booklet consists of 7 printed pages.

School : _____

Name : _____

Class : _____

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet (OAS). (20 marks)

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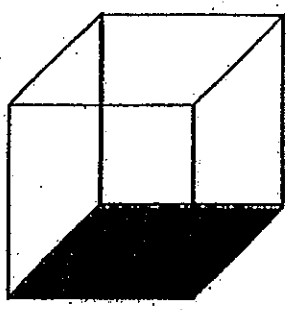
1. 12 is a multiple of _____ .

   (1) 6
   (2) 8
   (3) 9
   (4) 24

2. Subtract 0.26 from 18 tenths.

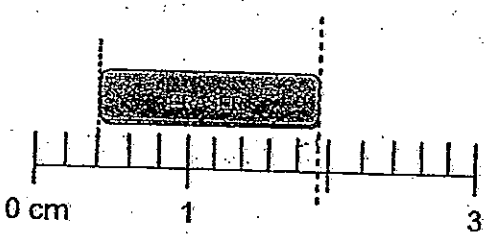
   (1) 0.08
   (2) 0.8
   (3) 1.54
   (4) 1.774

3. The figure below shows a cubical box with a height of 11 cm. What is the base area of the box?



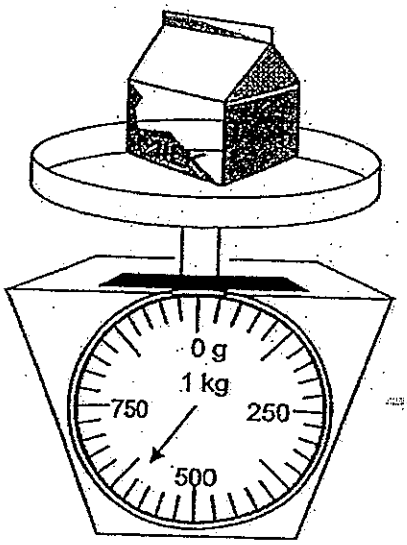
   (1) 22 cm^2
   (2) 33 cm^2
   (3) 121 cm^2
   (4) 1331 cm^2

4. What is the best estimate for the length of the eraser?



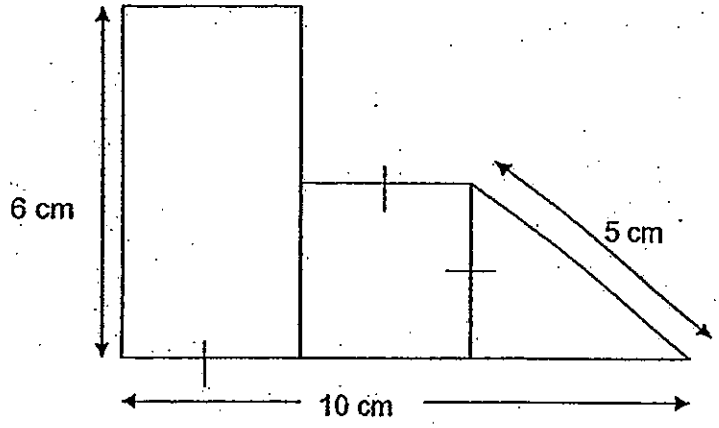
(1) 1.2 cm
(2) 1.5 cm
(3) 1.9 cm
(4) 2.0 cm

5. The figure below shows a packet of milk on the weighing scale. What is the mass of 2 such packets of milk?



(1) 1080 g
(2) 1150 g
(3) 1200 g
(4) 1250 g

6. The figure below is made up of a rectangle, a square and a triangle. Given that the length of the rectangle is twice its breadth, find the perimeter of the whole figure.



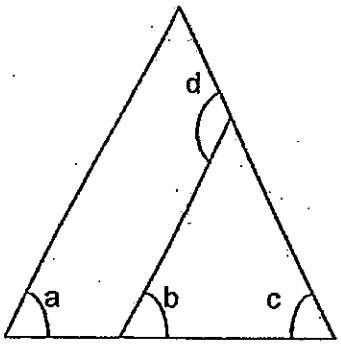
(1) 21 cm

(2) 27 cm

(3) 30 cm

(4) 33 cm

7. The figure below shows two triangles. Which one of the following statements is true about the figure?



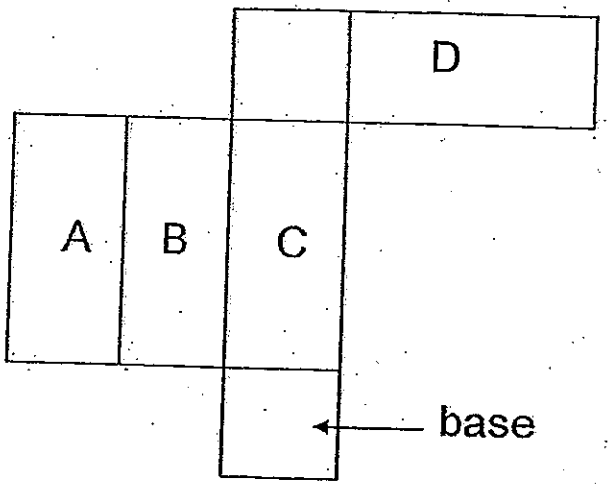
(1) $\angle c + \angle d = \angle a$

(2) $\angle b + \angle c = \angle d$

(3) $\angle a + \angle b + \angle c = 180°$

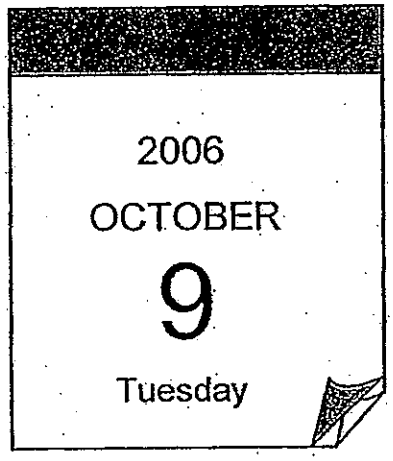
(4) $\angle b + \angle c + \angle d = 180°$

8. The figure below is a net of a cuboid. Name two faces of the cuboid that are opposite each other.



(1) A and B
(2) A and D
(3) B and D
(4) C and D

9. Amelia was born on the date as shown in the calendar below. Her cousin, Roy, was born 10 days before her. What day of the week was Roy's birthday?



(1) Sunday
(2) Monday
(3) Friday
(4) Saturday

10. Kenny and Dylan each used some letters to make a set of patterns on rectangular cards as shown below.
They make repeated patterns with the cards created.

Kenny ~~Karen~~ | A B C D |

Dylan | D A B C E |

Which letter will first appear in the same position in both patterns?

(1) A
(2) B
(3) C
(4) D

11. There were 10 more boys than girls at an outing. Each boy was given 3 sweets and each girl was given 4 sweets. A total of 156 sweets were given to the children. How many boys were there at the outing?

(1) 36

(2) 28

(3) 18

(4) 8

12. Winnie is n years old. She is 3 times as old as Joyce. Amanda is 4 years younger than Joyce. How old is Amanda?

(1) $\frac{n}{3} - 4$

(2) $\frac{n}{3} + 4$

(3) $3n + 4$

(4) $3n - 4$

13. The table below shows the charges for delivering a parcel.

First 50 g	\$1.50
Every additional 20 g or part thereof	\$1.00

Jolin paid \$4.50 for the delivery of a parcel. Which one of the following is the possible mass of her parcel?

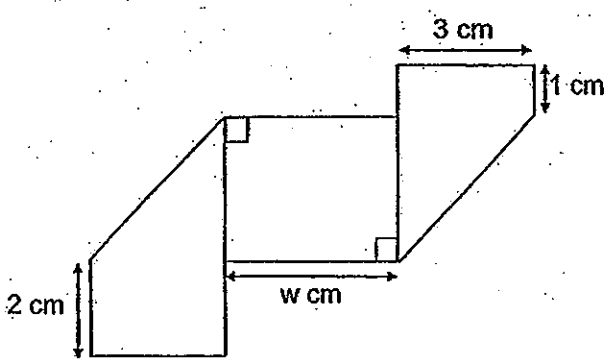
(1) 150 g

(2) 115 g

(3) 95 g

(4) 90 g

14. A rectangular piece of paper of perimeter 32 cm was folded once at the two ends to form the shape as shown below. Find the value of w.



(1) 10
(2) 8
(3) 6
(4) 4

15. The average price of 3 key chains and 2 mugs is $10.50.
The average price of the key chains is $8.50.
Find the average price of the mugs.

(1) $9.00
(2) $2.00
(3) $12.50
(4) $13.50

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2013
数学 MATHEMATICS
PAPER 1
BOOKLET B

Date : 23 August 2013
Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

√ Do not open this booklet until you are told to do so.
√ Follow all instructions carefully.
√ Answer all questions.
√ You are not allowed to use a calculator

This booklet consists of 9 printed pages.

School : _____
Name : _____
Class : _____

TOTAL	/ 20

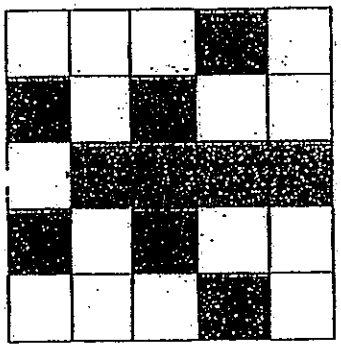
Questions **16** to **25** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

16. Find the value of $7 \times (10 + 14) - 18 \div 9$.

Ans: _____

17. Draw a line of symmetry for the figure below.



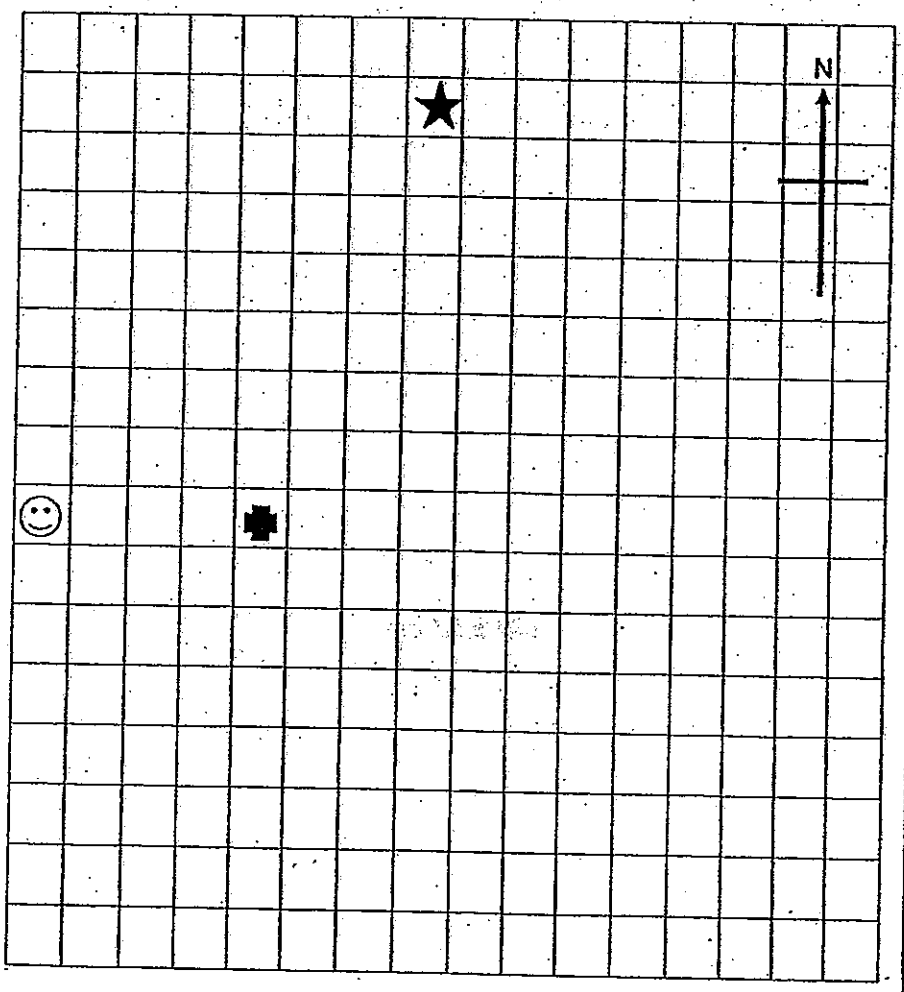
18. The following three sentences describe the location of point X.

(i) ★ is exactly on the north-east of point X.

(ii) ☺ is exactly on the South-west of point X

(iii) ✱ is exactly on the South-east of point X.

Mark "X" on the grid map below to indicate the location of point X.



Do not write in this space

19. Last year Malcolm was 14 years old and Mrs Tan was 42 years old. How old will Malcolm be when Mrs Tan is n years old?

Do not write in this space

Ans: _____

20. The table below shows the prices of apples and oranges sold at a supermarket.

Item	Price per item
Apple	m cents
Orange	(m + 5) cents

Benjamin bought 6 fruits. He bought the same number of oranges and apples. How much did he spend?
(Give your answer in terms of m.)

Ans: _____ cents

21. Express 0.08 as a percentage.

Ans: _____ %

22. 60% of Ryan's savings is equal to $\frac{3}{10}$ of Dean's savings.

Express Dean's savings as a ratio of Ryan's savings in its simplest form.

Do not write in this space

Ans: _____

23. Marcus bought a packet of potato chips for \$0.85 and a chocolate muffin for \$1.40. He gave the cashier a \$5 note. He received his change all in coins. What is the **least number of coins** Marcus would have received?

Ans: _____

24. 5.06 litres of water is poured into some 2-ℓ bottles. Each bottle is filled to the 2-litre mark except the last bottle. How much water is there in the last bottle?

Do not write in this space

2-ℓ bottle

Ans: _____mℓ

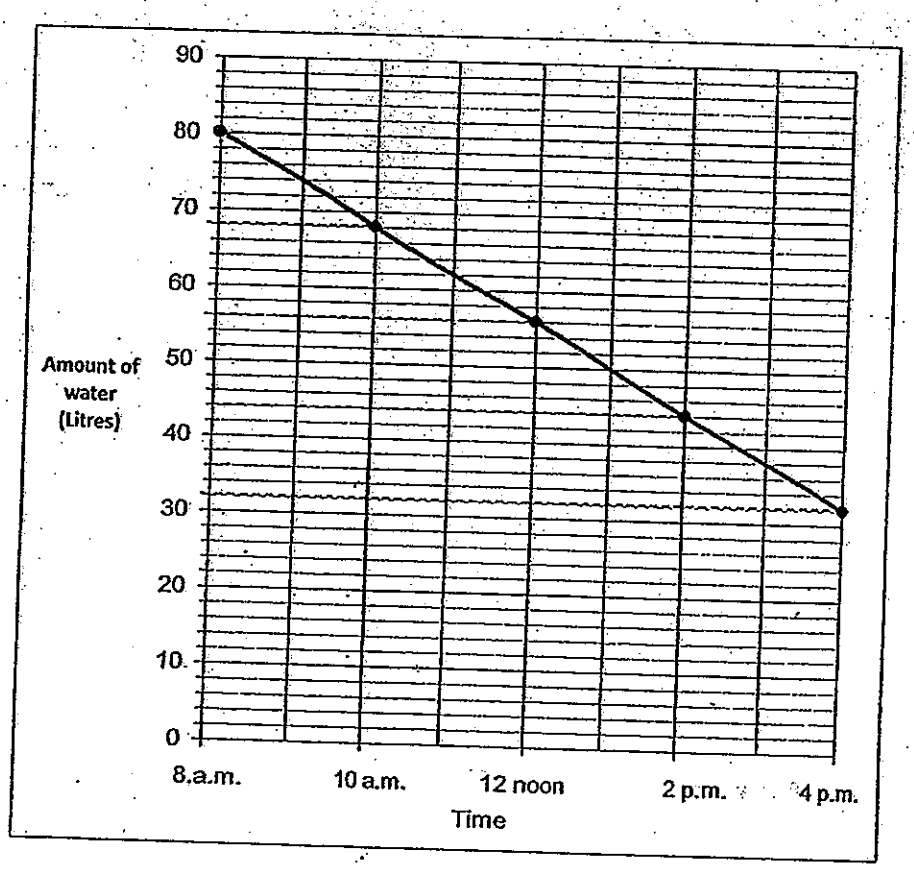
25. A construction company takes $\frac{3}{5}$ of a year to complete local projects that it has taken on. Given that each local project requires exactly $\frac{3}{10}$ of a year to complete, how many local projects has the company taken on?

Ans: _____

Questions **26** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answer in the units stated. (10 marks)

Do not write in this space

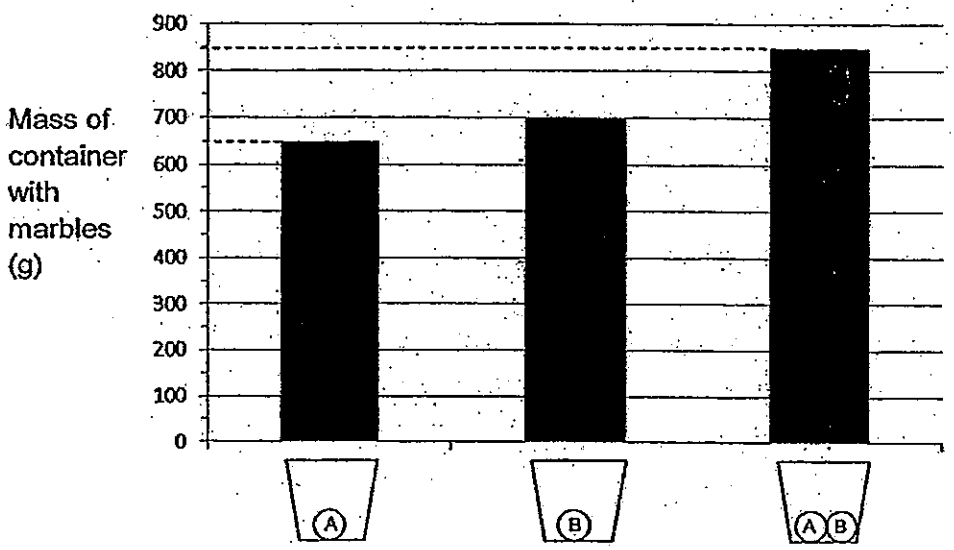
26. Water was leaking from a tank in a water company. The line graph below shows the amount of water in the tank over a period of 8 hours.



Given that the company had to pay a fine of $12 for every 4 litres of water leaked, how much fine did the water company pay from 8 a.m. to 4 p.m.?

Ans: $_____

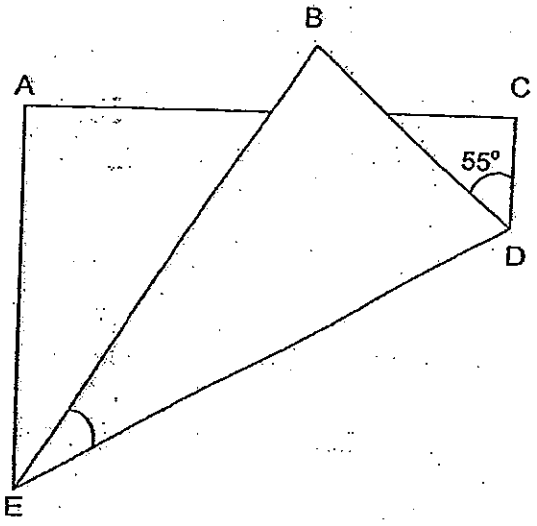
27. The graph below shows the mass of each identical container when different types of Marbles A and B are put in. Find the mass of one empty container.



Ans: _____ g

28. In the figure below, a rectangular piece of paper was folded as shown. Find $\angle DEB$.

Do not write in this space



Ans: _____ °

29. Amanda is given some money to buy some pens. She has used $\frac{4}{5}$ of her money to buy 8 pens. If she wants to buy 4 more pens, she will need another $1.40. What is the cost of 1 pen?

Do not write in this space

Ans: $_____

30. The ratio of the amount of water in Tank X to the amount of water in Tank Y was 1 : 4 at first. When 35 ℓ of water was transferred from Tank X to Tank Y, the new ratio became 1 : 9. How much water was in Tank Y at first?

Ans: _____ ℓ

End of Paper 1

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2013
数学 MATHEMATICS
PAPER 2

Date : 23 August 2013
Total Time for Paper 2: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.
√ Follow all instructions carefully.
√ Answer all questions.
√ Show your working clearly as marks are awarded for correct answers
√ You are allowed to use a calculator.

This booklet consists of 16 printed pages.

School : _____
Name : _____
Class : _____

Booklet A	
Booklet B	
Paper 2	
Total Marks	

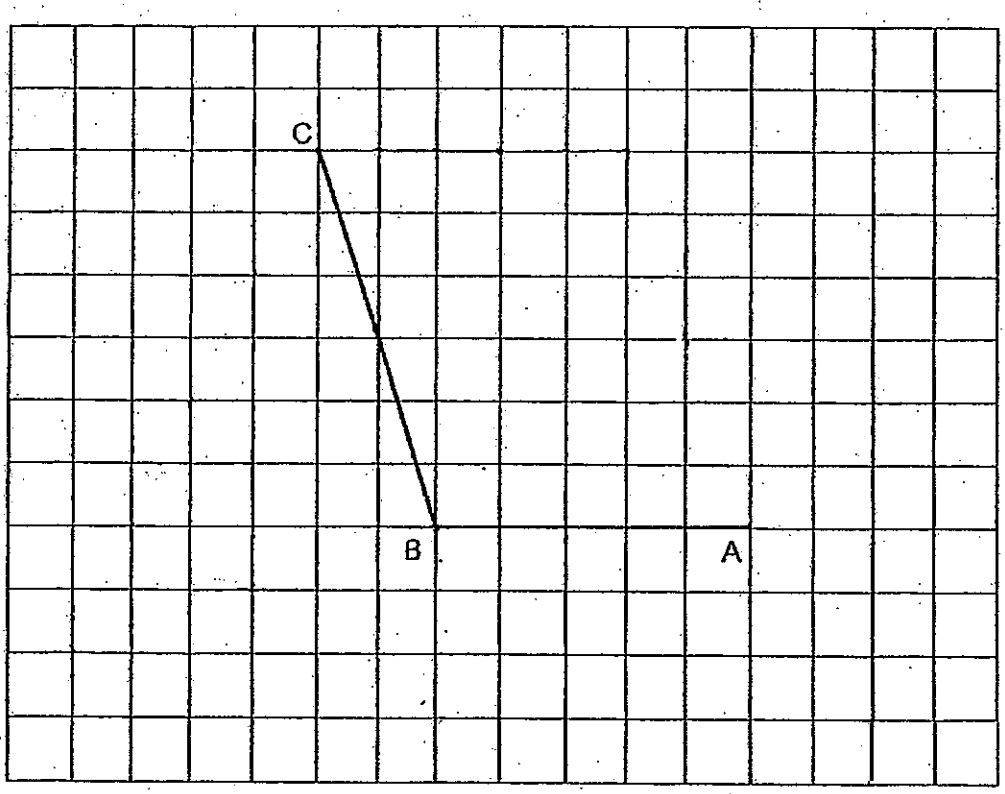
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

Do not write in this space

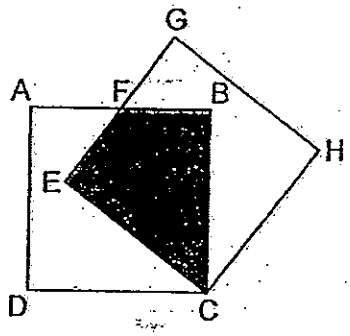
1. In the square grid below, two sides of a parallelogram ABCD have been drawn.

   (a) Complete the drawing of the parallelogram ABCD.
   (b) CB also forms one side of a triangle in which $\angle$ CBE is a right angle and CB = BE. Complete the drawing of the triangle CBE within the grid.



2. The figure below shows 2 identical squares. Lines AF, FB, EF and FG are of the same length. The shaded area is 50 cm^2. Find the area of the unshaded parts.

Do not write in this space



Ans: _____ cm^2

3. Some chairs were lined up in a row from one end to the other end of a field at an equal spacing of 1.3 m apart. When a few chairs were removed, the remaining 6 chairs had to line up from one end to the other end of the field at a new equal spacing of 2.6 m apart. How many chairs were removed?

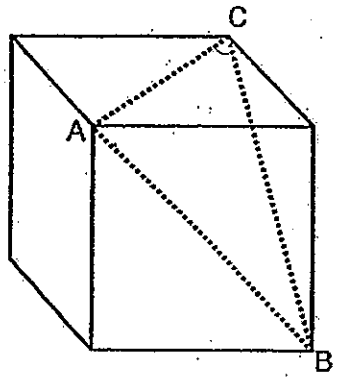
Ans: _____

4. Jordan has a rectangular board that measures 15 cm by 11 cm. He uses 35 identical square tiles to cover the board leaving an area of 25 cm^2 uncovered. Find the area of one square tile used.

Do not write in this space

Ans: _____ cm^2

5. The figure below shows a cube. Given that *A*, *B* and *C* are points at the corners of the cube, what is $\angle$ ABC?



Ans: _____ °

Name : _____ Date: 23 August 2013

Class : _____

Do not write in this space

For questions 6 to 18, show your working clearly in the space below each question and write your answers in the spaces provided.

The number of marks available is shown in the brackets [ ] at the end of each question or part-question. (50 marks)

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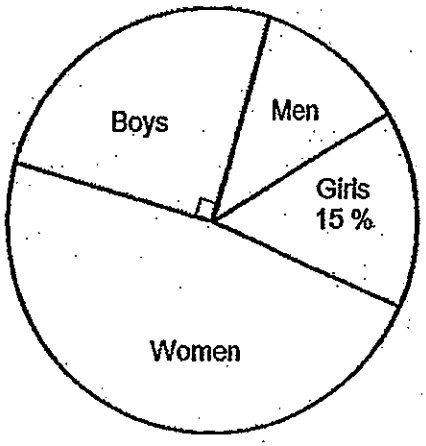
6. In a fruit stall, the number of apples was $\frac{4}{5}$ the number of pears. After some pears were sold, the number of pears decreased to 40% of the total number of fruits left. There was a total of 600 apples and pears left. How many pears were sold?

Ans : _____ [3]

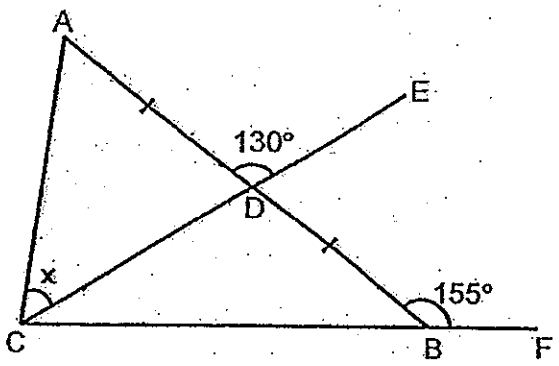
7. The pie chart below shows the percentage of men, women, boys and girls at a funfair. There were 675 boys at the funfair. The number of men was $\frac{1}{4}$ the number of women. How many men were there at the funfair?

Do not write in this space



Ans : _____[3]

8. In the figure below, ABC is a triangle. CF and CE are straight lines. AD = DB, ∠ADE = 130° and ∠ABF = 155°. Find ∠x.

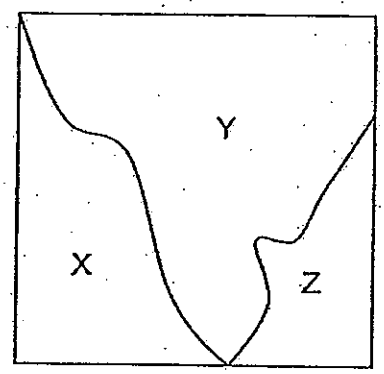


Do not write in this space

Ans : _____ [3]

9. In the figure below, a square is cut into 3 parts X, Y and Z. The area of X is $\frac{1}{3}$ of the area of the whole square and the area of Y is $\frac{7}{4}$ of the area of Z. What is the ratio of the area of X to the area of Y to the area of Z?

Do not write in this space



Ans : _____ [3]

10. After using $\frac{1}{3}$ of his potatoes, a food stall owner bought another 2 kg of potatoes. As a result, the stall owner now has $\frac{5}{6}$ as much potatoes as what he had at first. How many kilograms of potatoes were there at first?

Do not write in this space

Ans : _____ [3]

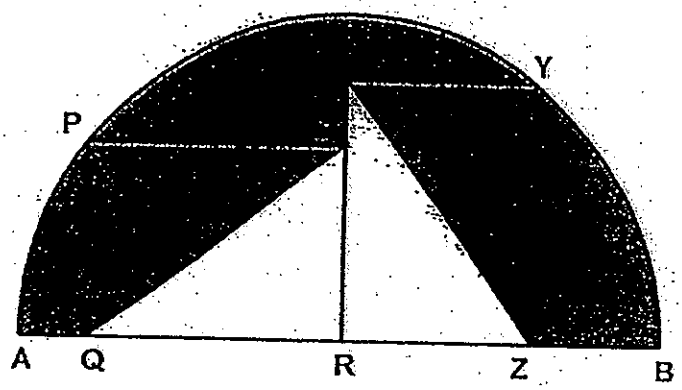
11. Mr Wang drove at a constant speed from Town A to Town B. At 9.20 a.m., he was 794 km from Town B and 206 km from Town A. At 12.50 p.m., he stopped at a petrol kiosk which was midway between Town A and Town B. At what speed did Mr Wang drive before he reached the petrol kiosk?

Do not write in this space

Ans : _____ [4]

12. The figure below shows two identical rectangles within a semicircle of diameter 10 cm. R is the centre of the semicircle. Given that Rectangle PQRS and Rectangle XYZR has a perimeter of 14 cm each and line XS is 1 cm. Find the perimeter of the shaded part. (Correct your answer to 2 decimal places)

Do not write in this space

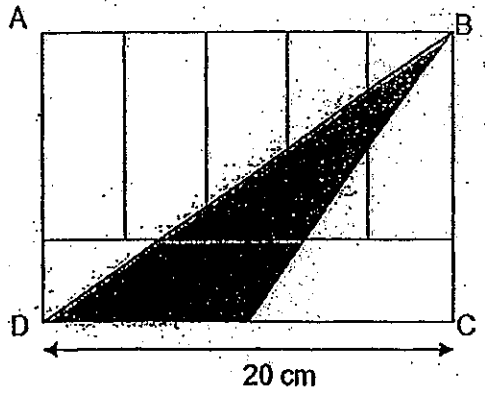


Ans :_____[4]

13. In the figure below, rectangle ABCD is made up of 7 identical smaller rectangles.

Do not write in this space

(a) Find the perimeter of the rectangle ABCD.
(b) Find the area of the shaded triangle.

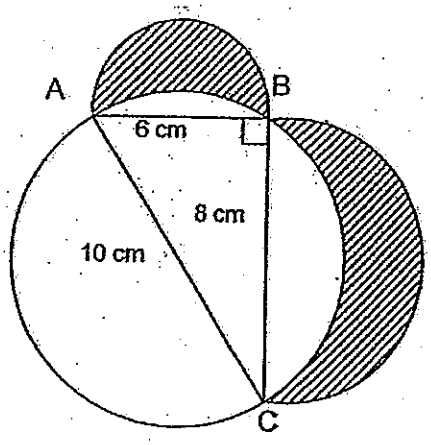


Ans : (a)_____[3]

(b)_____[1]

14. The figure below is made up of a right-angled triangle and a circle overlapping two semicircles. AC is the diameter of the circle.
(Take $\pi = 3.14$)

(a) Find the perimeter of the shaded parts.
(b) Find the total area of the shaded parts.



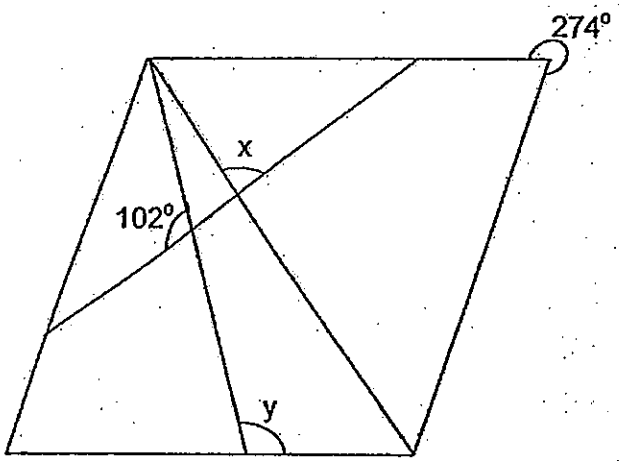
Do not write in this space

Ans : (a)_____ [2]

(b)_____ [3]

15. The figure below shows a rhombus divided into 6 parts with 3 straight lines. Find the sum of $\angle x$ and $\angle y$.

Do not write in this space



Ans : _____ [4]

16. Nigel had some 20¢ coins and 50¢-coins. He spent $\frac{1}{2}$ of his 20¢ coins and 75% of his 50¢ coins. The value of 20¢ coins left was the same as the value of 50¢ coins left. Given that the difference between the value of 20¢ coins and the value of 50¢ coins he had at first was $40, how much did Nigel have at first?

Do not write in this space

Ans : _____ [4]

17. In a shooting practice, Joel obtained the scores of 5, 7, 8 and 9 after shooting four times. The highest possible score for each shot was 10. After another three shots, Joel's average score became 8. Then, he had another three shots and his average score became 8.5.
What were the possible scores for the last three shots?

Do not write in this space

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Scores	5	7	8	9						

Ans : _____, _____, _____ [5]

18. Ali, Ben and Calvin collected stamps in the ratio 7 : 4 : 9. After Calvin gave $\frac{3}{10}$ of his stamps to Ali and Ben, Ali had 60 more stamps than Calvin and Ben's number of stamps increased by 35%.

(a) What was the ratio of Ali's stamps to Ben's stamps to Calvin's stamps in the end?

(b) How many stamps did Calvin have at first?

Do not write in this space

Ans : (a) _____ [3]

(b) _____ [2]

End of Paper 2

Answer Key

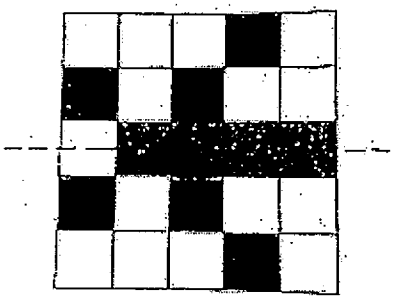
EXAM PAPER 2013

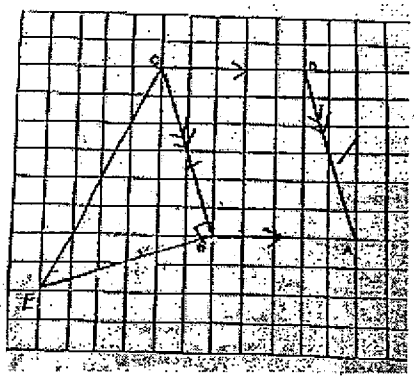
SCHOOL : HOKKIEN PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATHS
TERM : SA2

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1	3	3	2	3	3	2	3	4	4	2	1	3	4	4	

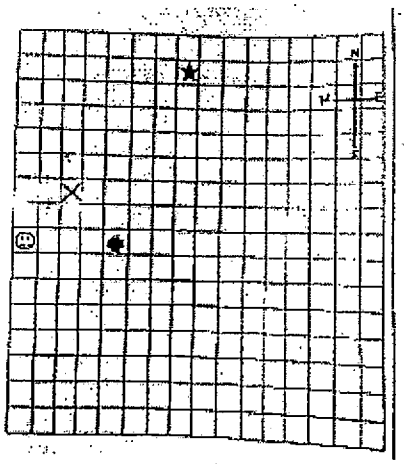
16) 166
17)
18)
19) n-28 years old
20) 6m+15 cents
21) 8%
22) 2:1
23) 5 coins
24) 1060 ml
25) 2
26) $144
27) 500g
28) 27.5°
29) $ 0.70
30) 280 l





Paper 2#

1)
2) 50x2 = 100cm^2
3) 6-1 = 5
   2.6x5=13
   13÷1.3 = 10
   10+1 = 11
   11-6 =5
4) 15x11= 165
   165-25 = 140
   140÷35 = 4



5) AC=AB=BC
   Triangle ABC is an Equilateral Triangle,
   <ABC = 60°

6) 100% → 600
40% → 240
60% → 360
360÷4=90
90x5=450
450-240=210

7) 25% → 675
100% → 2700
100%-25%-10% = 60%
60% → 1620
1620 ÷ 5 = 324

8) 180-130=50
180-155=25
180-130-25=25
(180-50)÷2=65°

9) 7+4 = 11
11 ÷ 2 = 5.5
X : Y : Z
5.5 : 7 : 4
11 : 14 : 8

10) 6u – 2u = 4u
5u – 4u = 1u
1u → 2kg
6u → 12kg

11) 794+206=1000
1000÷2=500
794-500=294
9.20am to 12.50pm = 3h30mins
3x2=6
6+1 = 7
294 ÷ 8 = 42
42x2 = 84km/h

12) 14-1—1=12
12÷4=3
3+1=4
10-4-3=3
$\frac{1}{2} \times \pi \times 10 = 15.71$
5x2=10
15.71+10+3+1=29.71cm

13) a) 20÷5=4
20÷2=10
10+4 =14
20+20+14+14=68

b)
$\frac{1}{2} \times 14 \times 10 = 70$

14) a)
$\frac{1}{2} \times 3.14 \times 10 = 15.7$
$\frac{1}{2} \times 3.14 \times 6 = 9.42$
$\frac{1}{2} \times 3.14 \times 8 = 12.56$
15.7+9.42+12.56=37.68
b)
$\frac{1}{2} \times 6 \times 8 = 24$

$\frac{1}{2} \times 3.14 \times 3 \times 3 + \frac{1}{2} \times 3.14 \times 4 \times 4 = 39.25$

$\frac{1}{2} \times 3.14 \times 5 \times 5 = 39.25$

39.25+24-39.29=24

15) 360-274=86
(360-86-86)÷2=94
(360-102-102)÷2=78
(180-86)÷2=47
360-102-47=211°

16)
25%B - 50%A =0
100%B - 100%A=40
100%B – 200%A=0
100%A ---40
100%B --- 80
40+80=120

17) 8x7 56
56-5-7-8-9 =27
27÷3=9
8.5x10 = 85
85-5-7-8-9-27 = 29
(10, 10, 9)

18)
A:B:C
7:4:9
70:40:90
3x9=27u
100% → 40u
B 135% → 54u
54-40 = 14u
27u -14u = 13u

A = 70+13 = 83u
C = 90-27 = 63u

A:B:C
83: 54:63

b) 20u → 60
90u → 270