Rosyth School
Semestral Assessment 1 Examination 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 -_____

Date: 14 May 2013 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet A)

Instructions to Pupils:

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

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

*** This booklet consists of 6 pages (including this cover page)**

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 oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

---

1. Arrange the following fractions from the smallest to the largest.

$$\frac{7}{10}, \quad \frac{1}{12}, \quad \frac{2}{5}$$

(1) $\frac{1}{12}, \frac{2}{5}, \frac{7}{10}$

(2) $\frac{2}{5}, \frac{1}{12}, \frac{7}{10}$

(3) $\frac{1}{12}, \frac{7}{10}, \frac{2}{5}$

(4) $\frac{2}{5}, \frac{7}{10}, \frac{1}{12}$

2. Which one of the following is the best estimate of $26.124 \div 87$?

(1) 0.03

(2) 0.3

(3) 3

(4) 30

3. 5 hundreds, 8 tenths and 9 thousandths is _____.

(1) 580.009

(2) 500.980

(3) 500.809

(4) 500.089

(Go on to the next page)

4. Which of the following can be divided by 3 and gives a remainder of 1?

(1) 1 056

(2) 2 081

(3) 3 024

(4) 4 540

5. Kelly saved \$n every week for the past eight weeks. This week, she saves \$2 less than last week. How much did she save altogether?

(1) \$6n

(2) \$(8n – 2)

(3) \$(9n – 2)

(4) \$(9n + 2)

6. Which one of the following is the same as 4 020 g?

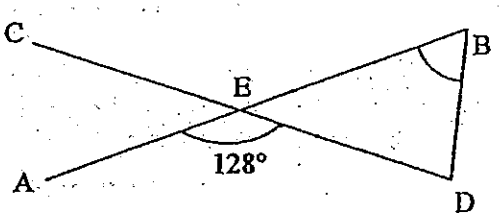
(1) 4 kg 2 g

(2) 4 kg 20 g

(3) 40 kg 2 g

(4) 40 kg 20 g

7. The figure below is not drawn to scale. AB and CD are straight lines. EB = ED. Find ∠EBD.



(1) 26°

(2) 52°

(3) 64°

(4) 128°

(Go on to the next page)

8. Mr Teo saved $200 from his salary every month.

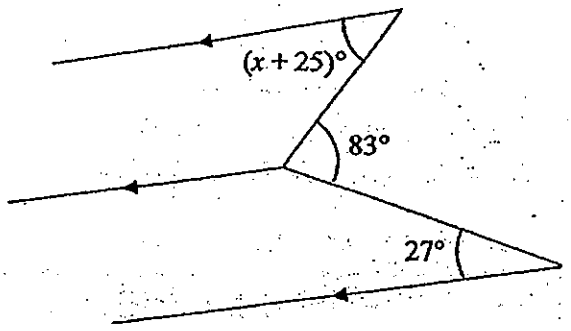
How much would he have saved $3\frac{1}{4}$ years later?

(1) $650
(2) $2 400
(3) $7 200
(4) $7 800

9. Meili started doing her homework at 8.45 a.m. She took an hour lunch break 3 hours later. After that, she continued doing her work for another $2\frac{1}{2}$ hours. What time did she stop doing her work?

(1) 2.15 p.m.
(2) 2.45 p.m.
(3) 3.15 p.m.
(4) 4.15 p.m.

10. The diagram below is not drawn to scale. Find the value of x.



(1) 27°
(2) 31°
(3) 56°
(4) 58°

(Go on to the next page)

11. Julian used $\frac{1}{4}$ of his money as downpayment on a new bicycle, $\frac{3}{8}$ of it on a camera and $\frac{1}{3}$ of the remainder on shoes and a watch. The cost of the watch was \$110 and the shoes cost \$80 more than the watch. How much was the downpayment on the bicycle?

(1) \$600
(2) \$800
(3) \$1 600
(4) \$2 400

12. A food caterer charges \$11 for meals delivered on time and \$7 for meals delivered late. In April, the company collected \$8 400. For every 12 meals delivered, 3 were delivered late. What was the total number of meals delivered late?

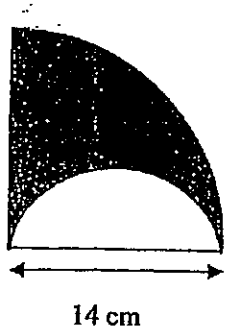
(1) 70
(2) 210
(3) 3
(4) 630

13. Mr Ramy saved 20% of his salary every month. He donated 50% of his savings to charity. If he donated \$600 each month, what was his monthly salary?

(1) \$1 200
(2) \$2 000
(3) \$3 000
(4) \$6 000

(Go on to the next page)

14. The figure below is not drawn to scale. It is made up of a quarter circle and a semi-circle. Find the perimeter of the shaded part in terms of π.



(1) $(3.5\pi + 14)$ cm

(2) 10.5π cm

(3) 14π cm

(4) $(14\pi + 14)$ cm

15. Jasmine and Taufik took part in a race. When Taufik had completed $\frac{1}{3}$ of the race in 15 minutes, Jasmine had ran $\frac{3}{4}$ of the race. Jasmine's average speed for the race was 40 m/min more than Taufik. Find the distance of the race.

(1) 600 m

(2) 800 m

(3) 1 440 m

(4) 1 800 m

Rosyth School
Semestral Assessment 1 Examination 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6

Date: 14 May 2013 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet B)

Instructions to Pupils:

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

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

*** This booklet consists of 8 pages (including this cover page)**

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)

---

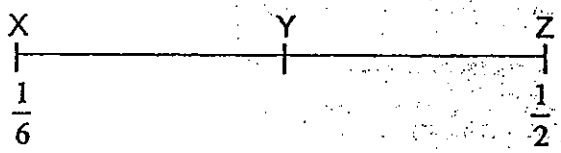
16. Find the sum of 41, 3.7 and 6.03.

Ans: _____

17. Lily bought 6 litres of juice. She finished $\frac{5}{12}$ of the juice. How many millilitres of juice had she left?

Ans: _____ mℓ

In the number line below, X represents $\frac{1}{6}$, Z represents $\frac{1}{2}$ and XY = YZ. What fraction is represented by Y? Leave your answer as a fraction in the simplest form.



Ans: _____

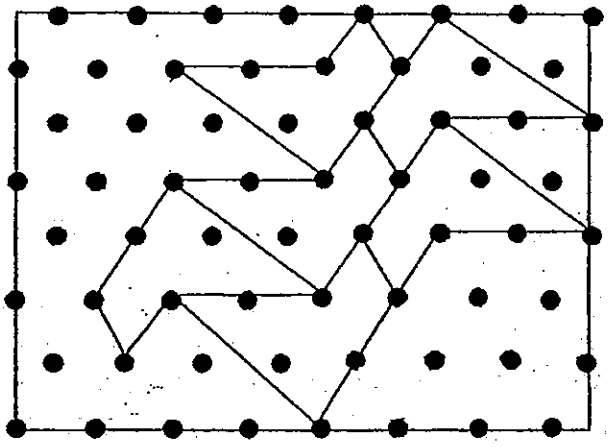
(Go on to the next page)

19. The average of the 4 numbers shown below is 22.
Which number should be removed to obtain an average of 24 for the remaining numbers?

16, 18, 24, 30

Ans: _____

20. Complete the tessellation below by drawing 2 more unit shapes in the grid provided.



(Go on to the next page)

21. Manesh cut a piece of rope g cm long into 25 equal pieces. In the end, he found that he had 6 cm of the rope left. What was the length of each piece? Express your answer in terms of g.

Ans: _____cm

22. A frog is able to cover a distance of 30 cm in one jump. What is the least number of jumps it would need to cover a distance of 130 cm?

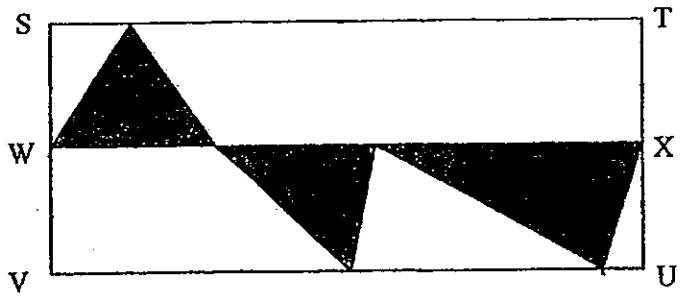
Ans: _____

23. Samy had 54 boxes of pens. Each box contained 8 pens. He repacked all the pens into boxes of 6 pens each. How many more boxes would he need?

Ans: _____

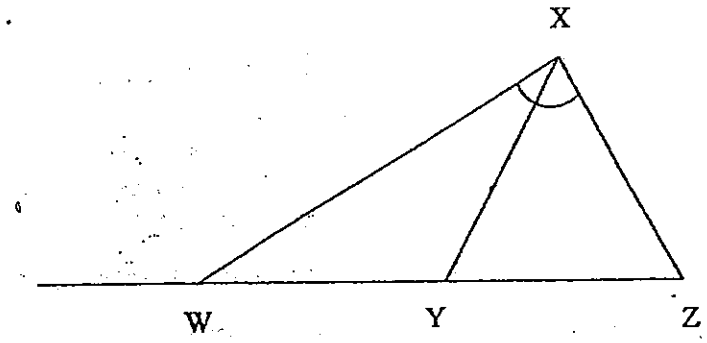
(Go on to the next page)

24. In the figure below, STUV is a rectangle. SW = WV and TX = XU.
What fraction of the figure is shaded?



Ans: _____

25. The figure below is not drawn to scale. XYZ is an equilateral triangle.
XY = WY. Find ∠WXZ.



Ans: _____°

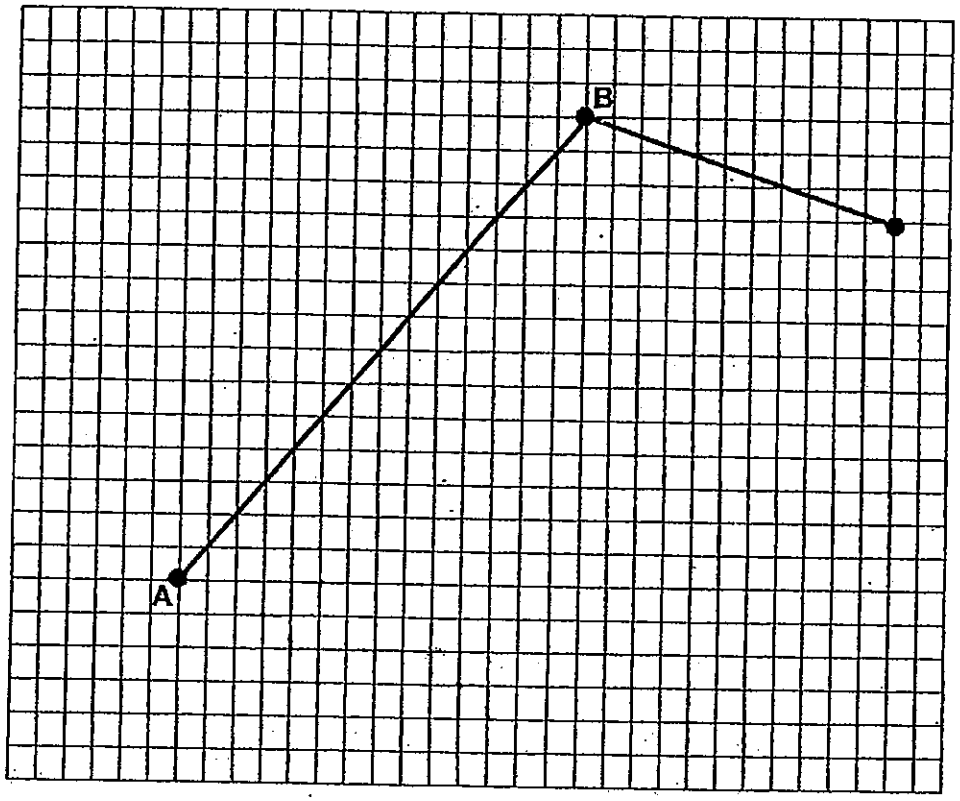
(Go on to the next page)

Questions **26** to **30** carry 2 marks each. Show your workings 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)

---

26. Complete the figure below such that ABCD is a parallelogram.

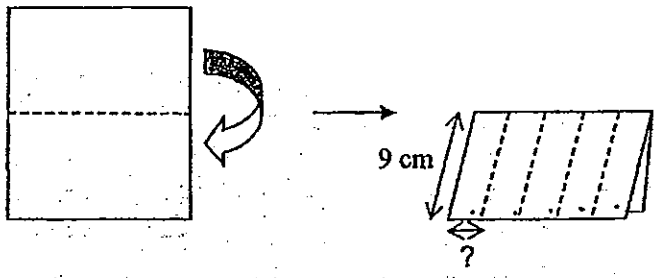


(Go on to the next page)

27. A motorist travelling at 80 km/h took 6 hours to complete his journey. If he decreased his speed by 20 km/h, how much longer would he take to complete the same journey?

Ans: _____h

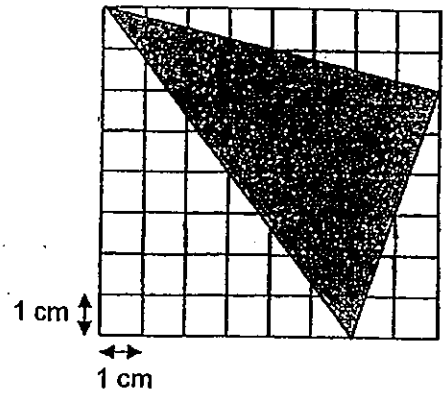
28. Jenny had a piece of paper with an area 720 cm^2. She folded it into half as shown in the diagram below (not drawn to scale). Then, she cut the folded paper into 5 equal strips. If the folded paper has a side of 9 cm, find the width of each strip.



Ans: _____cm

(Go on to the next page)

29. Find the area of the shaded part in the figure shown below.



Ans: _____ cm^2

30. Pupils in a swimming class are divided equally into 2 groups. The ratio of the number of boys to the number of girls in Group A is 3 : 1. The ratio of the number of boys to the number of girls in Group B is 5 : 2. What is the ratio of the number of boys in Group A to the number of girls in Group B?

Ans: _____

End of Paper 1

Rosyth School
Semestral Assessment 1 Examination 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 -_____

Date: 14 May 2013 Parent's Signature: _____

Time: 1 h 40 min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. **Show your workings clearly** as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

*** This booklet consists of 17 pages (including this cover page)**

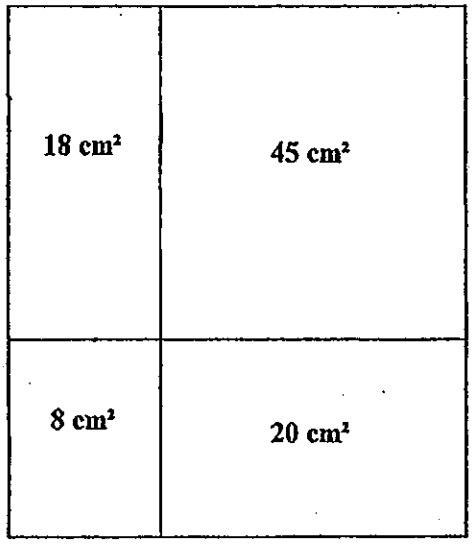
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

Do not write in this space

1. The figure (not drawn to scale) below is made up of 4 rectangles.

   Find the perimeter of the whole figure.



Ans: _____ cm

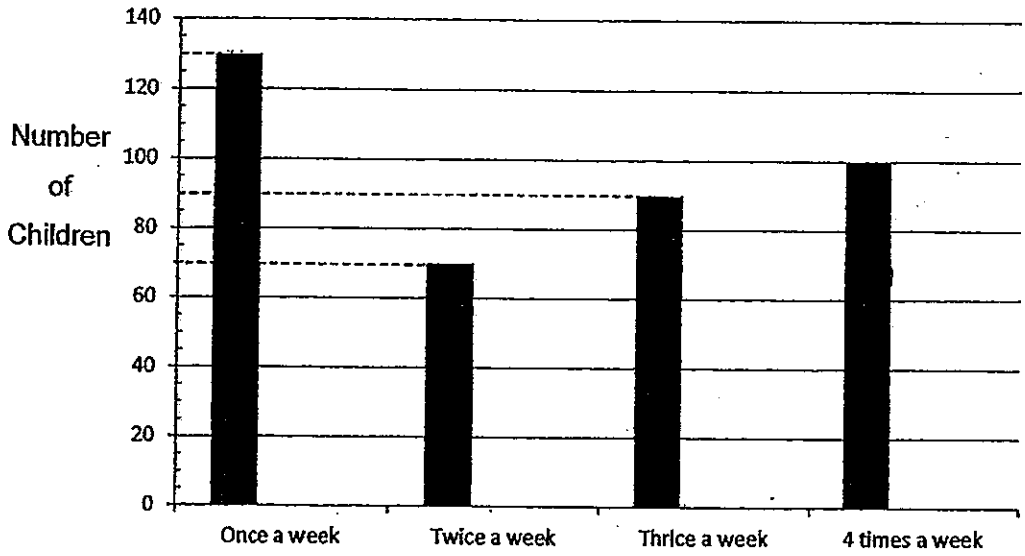
2. 60 cleaners take 12 days to clean a school. How many cleaners are required to clean the same school in 30 days?

Ans: _____

(Go on to the next page)

3. A survey was conducted to find out the number of times some children visited the library in a week.

Do not write in this space



Number of visits to the library in a week

What fraction of the children visited the library at least twice a week?

Ans: _____

(Go on to the next page)

Do not write in this space

4. When Nathan spent $\frac{2}{3}$ of his money and Mark spent $\frac{1}{5}$ of his money, each of them had $360 left. How much more did Nathan have than Mark at first?

Ans: $ _____

5. An amphitheatre at a bird park has a seating capacity of either 84 adults or 112 children. If 39 adults and 35 children have already bought the admission tickets into the amphitheatre, how many more children can enter the amphitheatre?

Ans: _____

(Go on to the next page)

Questions **6** to **18**, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

(50 marks)

Do not write in this space

---

6. The average number of books that were owned by Alice, Billy and Cathy each was 19. After Cathy's sister gave her another 8 books and Alice gave away 5 books, Alice and Cathy had the same number of books. If Billy owned 16 books, how many books did Alice have at first?

Ans: _____ [3m]

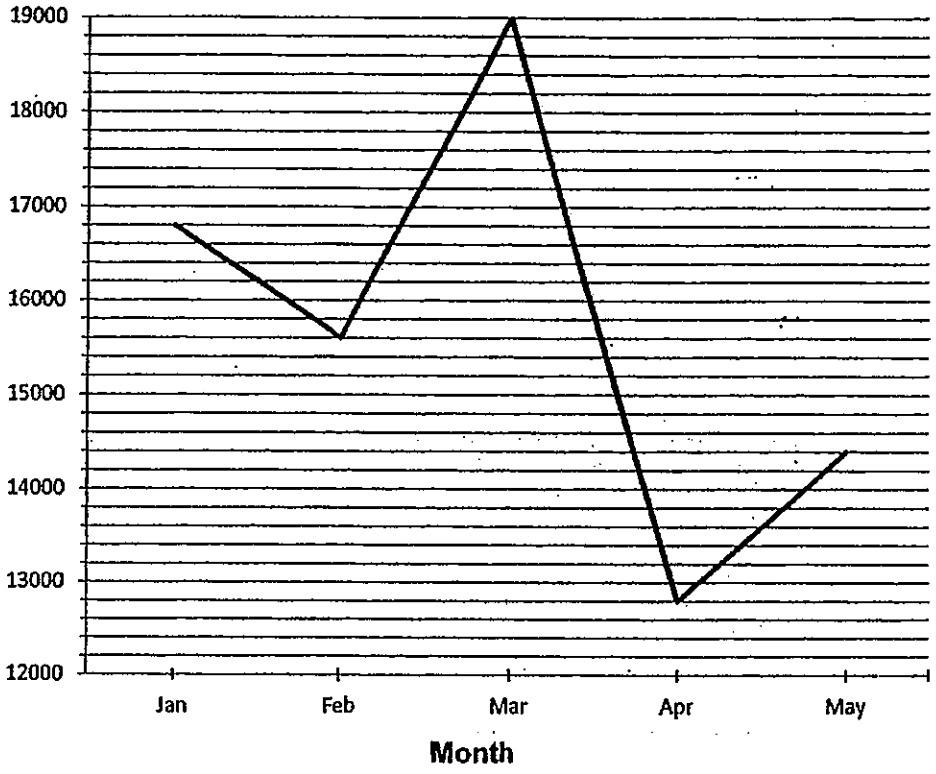
(Go on to the next page)

7. Use the information below to answer questions (a) and (b).

The graph below shows the number of cream puffs sold from January to May.
The number of cream puffs sold was recorded at the end of every month.

Do not write in this space

Number of cream puffs sold



(a) In which month was there the greatest increase in the number of cream puffs sold?

(b) The total number of cream puffs sold from January to March was $\frac{4}{5}$ the number of cream puffs sold from April to June. How many cream puffs were sold in June?

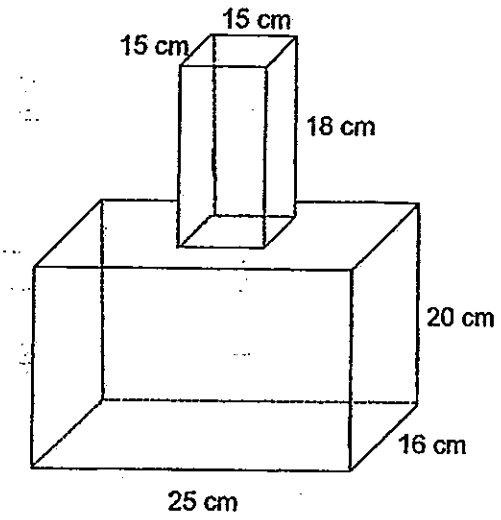
Ans: (a)_____ [1m]

(b)_____ [2m]

(Go on to the next page)

8. The container shown below was filled with water to a height of 32 cm at first. Then, half of the water was poured out of the container. What was the height of the water level after that?

Do not write in this space



Ans: _____ [3m]

(Go on to the next page)

9. The ratio of the number of Henry's pencils to the number of Yasmin's pencils was 3 : 5 at first. After each of them had received 45 pencils, Henry had $\frac{5}{8}$ as many pencils as Yasmin. Henry then bought another 65 pencils. How many more pencils did Yasmin have than Henry in the end?

Do not write in this space

Ans: _____ [3m]

(Go on to the next page)

10. Ahmad painted some toy cars in blue, red and green. 42 of them were painted in blue. $\frac{7}{10}$ of the remaining toy cars were painted in red. The number of green toy cars was 21% of all the toy cars he painted. How many toy cars did he paint altogether?

Do not write in this space

Ans: _____ [3m]

(Go on to the next page)

11. The table below shows the membership of a reading club in 2010.

Do not write in this space

Members	Number
Men	82
Women	112
Children	260
Senior Citizens	?

(a) Given that 50% of the members were children, how many members were senior citizens?

(b) In 2011, the number of senior citizens in the club increased to 186 but the number of children decreased to 218.

(i) Was there an overall percentage increase or decrease in the membership of the reading club in 2011?

(ii) Find the overall percentage increase or decrease in the membership of the reading club in 2011.

Ans: (a)_____ [1m]

(b)(i)_____ [1m]

(b)(ii)_____ [2m]

(Go on to the next page)

Do not write in this space

13. A bar of chocolate cost \$0.80. A free bar of chocolate was given for every purchase of 5 bars of chocolate. Diana spent \$60 buying some bars of chocolates. Then, she packed the bars of chocolate into packets of 3 each. She sold each packet for \$4.

(a) How many bars of chocolate did Diana get?

(b) How much money did she receive after selling all the packets of chocolate?

Ans: (a) _____ [2m]

(b) _____ [2m]

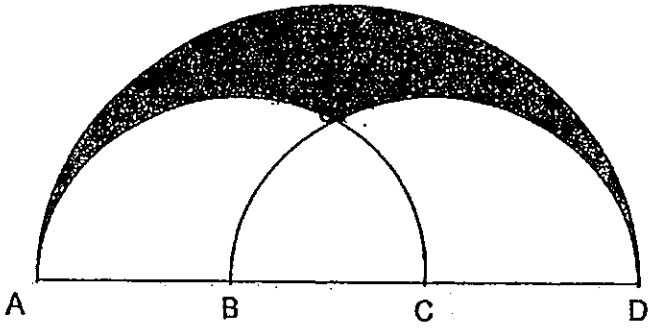
(Go on to the next page)

Do not write in this space

14. The figure is made up of a big semi-circle and 2 identical smaller semi-circles The length of AD is 60 cm. The region BXC has an area of ~~942~~ 242 cm^2 and BXC has a length of 62.8 cm. Given that AB = BC = CD, find

(a) the area of the shaded part and

(b) the perimeter of the shaded part. (Take π as 3.14)



Ans: (a)_____ [3m]

(b)_____ [2m]

15. An open-air concert ticket for an adult was priced at $85.50. There were 150 more male adults than female adults for the first night concert. For the second night concert, the number of female adults was decreased by 15% and the number of male adults was increased by 30%. If there were 1 270 adults in the second night concert, how much more money was collected from the sale of the tickets for the second night concert than the first night concert?

Do not write in this space

Ans: _____ [5m]

(Go on to the next page)

16. Miss Li and Miss Leo each sold a certain number of cupcakes at their shop. If Miss Li sold 60 cupcakes each day and Miss Leo sold 30 cupcakes each day, Miss Li would have 300 cupcakes left by the time Miss Leo finished selling all her cupcakes. If Miss Li sold 30 cupcakes each day and Miss Leo sold 60 cupcakes each day, Miss Li would have 930 cupcakes left by the time Miss Leo finished selling all her cupcakes. Find the number of cupcakes Miss Li had at her shop.

Do not write in this space

Ans: _____ [5m]

(Go on to the next page)

Do not write in this space

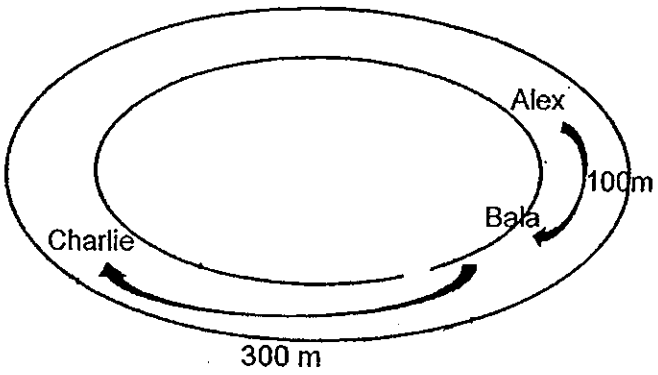
17. Sally had a bag which contained only black and white cards. $\frac{4}{5}$ of the cards in the bag were black cards. She removed 35 black cards and 5 white cards from the bag and divided the remaining cards into groups of 7 cards each. In each group, there were 5 black cards. Find the total number of cards in the bag at first.

Ans: _____ [4m]

(Go on to the next page)

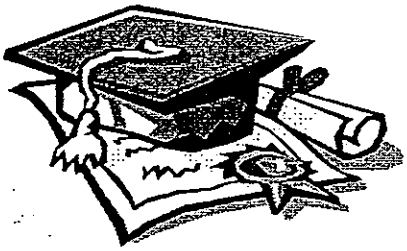
18. Alex, Bala and Charlie were all standing in a circular track for a race to start. All of them had to run in clockwise direction as shown in the diagram below. Charlie was 300 m ahead of Bala and Bala was 100 m ahead of Alex. At 8.30 a.m, they started the race. Alex overtook Bala in 2 minutes. In another 2 minutes, Alex overtook Charlie. If Bala's speed is 140 m/min, at what time did Bala overtake Charlie?

Do not write in this space

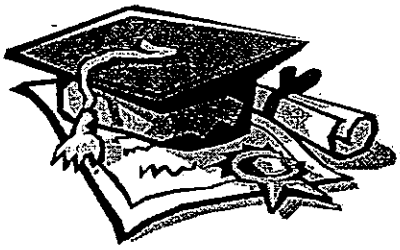


Ans: _____ [4m]

End of Paper



ANSWER SHEET



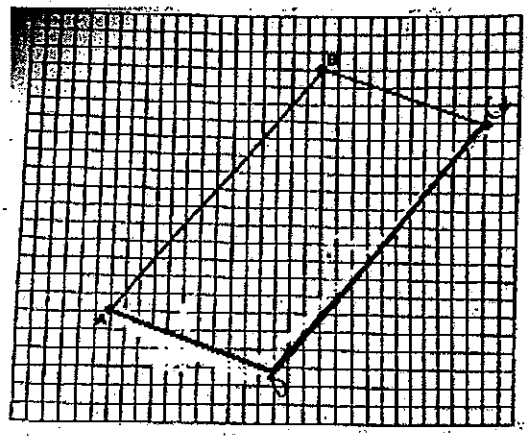
EXAM PAPER 2013

SCHOOL : ROSYTH PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATHEMATICS
TERM : SA1

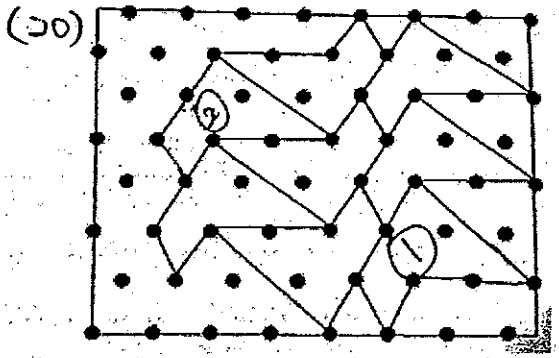
Booklet A

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

16. 50.73
17. 3500
18. 1/3
19. 16
20.21. (g-6)/25
22. 5
23. 18
24. ¼
25. 90°
26.



27. 2h
28. 8cm
29. 26
30. 21:8



Paper 2

1. 2+5+=7
7+7=14
9+4=13
13+13=26
26+14=40

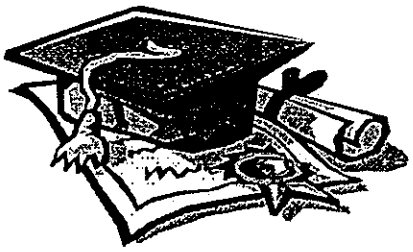
2. 60 --- 12days
   10 --- 72
   1 ---- 720
   730÷30=24
3. 70+90+100 = 260
   260/390=2/3
4. 1/3 --- 360
   3/3 --- 1080
   4/5 --- 360
   5/5 --- 450
   1080-450=630
5. A --- 1/84
   C --- 1/112
   1 – 39/84 – 35/112 = 25/112

   25/112 ÷1/112 = 25

6. 19x4=57
   2u --- 57+8-5-16 = 44
   1u --- 22
   22+5=27

7. A. March
   B. 16800+15600+19000=51400
   4u --- 51400
   5u --- 64250
   64250-14400-12800 = 37050
8. 20+18=38
   25x16x20=8000
   30-20=12
   12x5x15=2700
   2700+8000=10700
   10700÷2=5350
   5350÷25÷16=13.375
9. A --- After
   B --- Before
   3B +45 = 5A
   5B +45 = 8A

   2B = 3A
   1B = 1.5A



4.5A + 45 = 5A

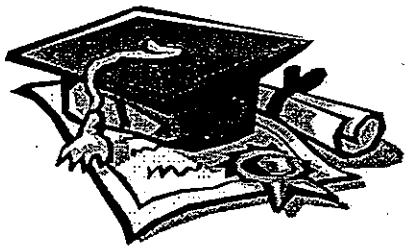
0.5A = 45

1A = 90

1B = 135

H = 5x90+65=515

Y = 8x90=720



720-515=205

10. 3u --- 21%

10u --- 70%

30% --- 42

100% --- 140

11. A. 50% -- 260

100% --- 520

520-260-112-82=66

B. Increase.

186-66=120

260-218=42

120-42=78

78/520x100% 15%

12. A. 180-31-31=118

360-108-118=134

180-134=46

B. (180-46)÷2=67

13. A. 60÷0.80=75

75÷5=15

75+15=90

B. 90÷3=30

30x4=120

14. A. ½ x3.14x30x30-3.14x20x20+242=399

B. 1/2x3.14x609+3.14x40-62.8=157

15. 130%+85%+195 ---1270

215%--- 1270-195=1075

1% --- 5
200%+150= 200x5+150=1150
1270-1150=120
120x85.50=10260

16. 120u+300=30u+930
90u---930-300=630
1u --- 7
120u --- 840
840+300=1140

17. 4/5 ---- black
1/5 ---- white
5x7=35
35+35+5=75
5/5= 75

18. A overtake B in 2 mins of distance 100m
A is 50m/min faster than B
B ----- 140m/min
A ----- 190m/min
A overtake C in another 2 mins
4 mins of distance 400m
A is 100m/min faster than C
C-----90m/min

300 ÷ (140-90)=6mins

8:30am + 6mins = 8.36am