RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 2
2008
Paper 1

Name : _____ (   ) Class: P5___
Banded Class: P5___

24 October 2008   MATHEMATICS   Att: 50 min

Your Score Out of **40** marks			
		Class	Level
Highest score			
Average score			
Parent's Signature			

Calculators are NOT allowed to be used in this paper.

<u>SECTION A (20 marks)</u>

Questions 1 to 10 carry 1 mark each. Question 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 your answer (1, 2, 3 or 4) on the OAS provided. All diagrams are not drawn to scale.

---

1. Round off 23.785 to 2 decimal places.

    (1)   23.77

    (2)   23.78

    (3)   23.79

    (4)   23.80   (   )

2. $\dfrac{6}{10} = \dfrac{9}{\Box}$

    What is the missing number in the $\Box$?

    (1)   13
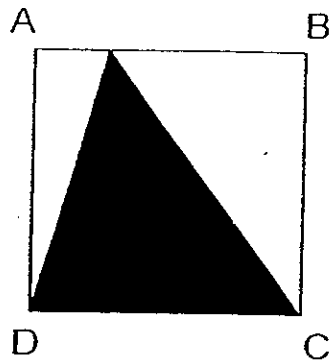
    (2)   15

    (3)   16

    (4)   19   (   )

3. The diagram below shows a square ABCD.
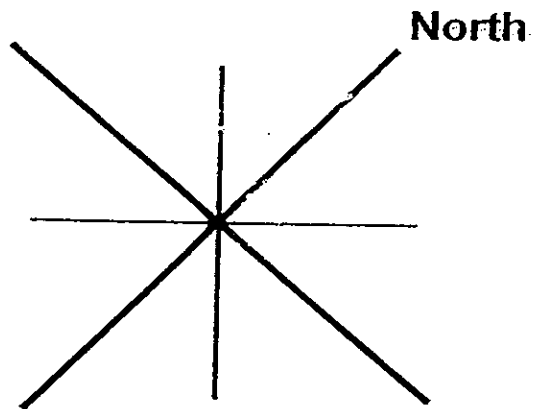   What fraction of the square is shaded?

A   B

D   C

(1) $\dfrac{1}{8}$

(2) $\dfrac{1}{2}$

(3) $\dfrac{1}{3}$
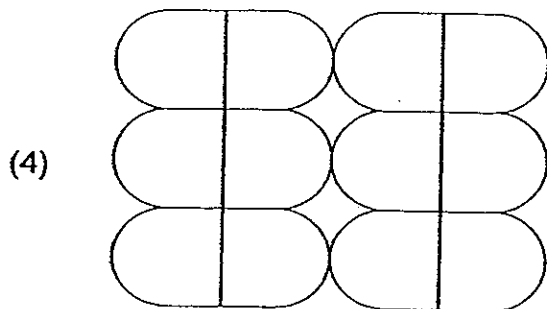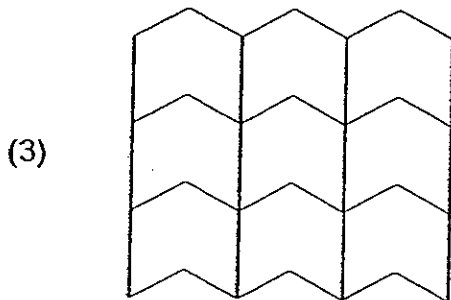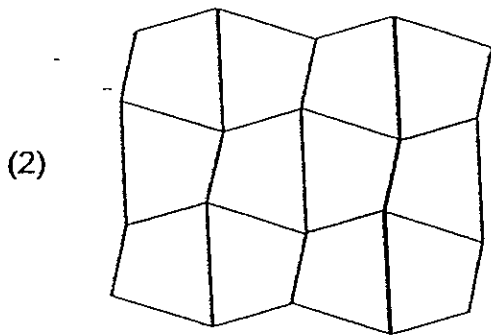
(4) $\dfrac{1}{4}$
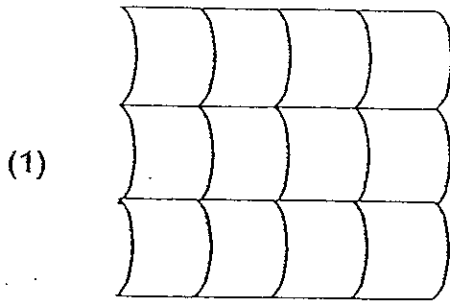
(   )

4. Linda is facing North.
   She turns 135^0 clockwise.
   Which direction is she facing now?

North

(1)   East

(2)   South

(3)   North East

(4)   South East

(   )

5. Which of the following is **not** a tessellation?

(1)

(2)

(3)

(4)

(   )

6. The length of the Primary 5 Mathematics Course Book is approximately
_____.

    (1)   3 mm

    (2)   3 cm

    (3)   3 m

    (4)   30 cm

                                                               (   )

7. What is 25% of 108?

    (1)   22

    (2)   27

    (3)   45

    (4)   54

                                                               (   )

8. Express 0.04 as a fraction in its simplest form.

    (1) $\dfrac{1}{25}$

    (2) $\dfrac{1}{8}$

    (3) $\dfrac{1}{4}$

    (4) $\dfrac{2}{5}$

                                                               (   )

9. The ratio of the length of each side of a triangle is 2 : 3 : 4.
The perimeter of the triangle is 81 cm.
Find the length of the shortest side.

(1) 9 cm
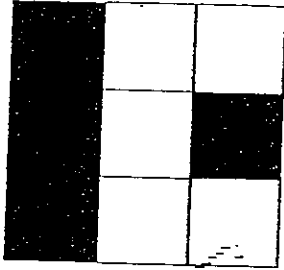
(2) 18 cm

(3) 27 cm

(4) 36 cm

( )

10. In a competition, 7 boys scored an average of 13 points.
Another 5 boys scored a total of 3 points.
What is the total number of points scored by all the boys?
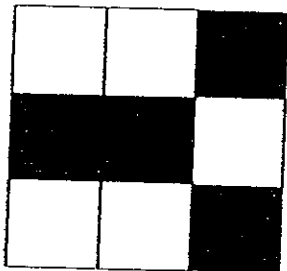
(1) 91

(2) 94

(3) 106

(4) 192

( )

11. Each of the figures below is made up of 9 squares.
4 squares in each figure are shaded.
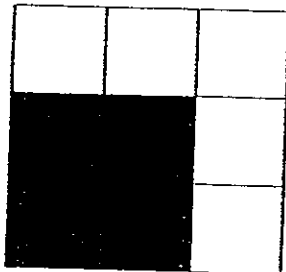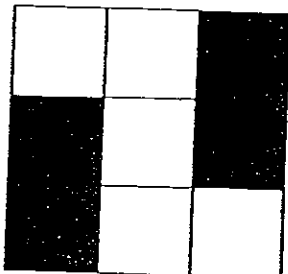Which figure does **not** have a line of symmetry?

(1)

(2)

(3)

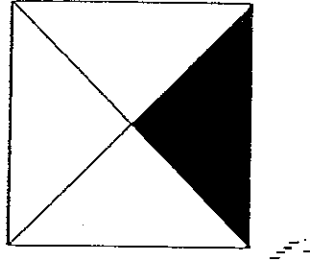(4)

( )

12. The diagram below is a square with an area of 64 cm². It is divided into 4 identical triangles.
What is the height and base of the shaded triangle?

	Height	Base
(1)	8cm	8cm
(2)	8cm	16cm
(3)	4cm	8cm
(4)	4cm	4cm

(   )

13. Jane cut a 2 m ribbon into 7 equal pieces.
Devi took one of Jane's ribbons and cut it further into 4 equal pieces. A piece of Devi's ribbon is _____ m long.

(1) $\dfrac{1}{14}$

(2) $\dfrac{7}{8}$

(3) $1\dfrac{1}{14}$

(4) $1\dfrac{1}{7}$

(   )

14. The ratio of Peter's age to Mary's age is 5 : 2.
    Peter is 36 years older than Mary.
    How old was Mary 5 years ago?

    (1)   19

    (2)   24

    (3)   29

    (4)   41   (   )

15. A 2-digit number is a multiple of 4 and a factor of 60.
    What is the number?

    (1)   12

    (2)   16

    (3)   24

    (4)   40   (   )

—— End of Section A ——

Questions 16 to 25 carry 1 mark each. Questions 26 to 30 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form.

16. Complete the number pattern below:

31, 33, 36, 40, _____, 51, 58 , 66

Ans: _____

17. $2.99 = $ _____ $+ 0.9$

What is the missing number above?

Ans: _____

18. Mary had 42 fruits. $\frac{2}{7}$ of them were oranges and the rest were apples. How many apples did Mary have?
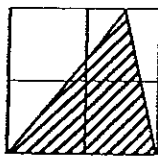
Ans:_____

19. A metal ball weighs $\frac{1}{3}$ kg. What is the mass of 3 such metal balls in kg?
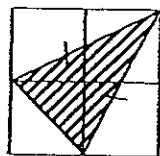
Ans: _____ kg

20. Cheryl bought 3 m of cloth. She used 155 cm of it to make a tablecloth. How many metres of cloth had she left?

Ans: _____ m
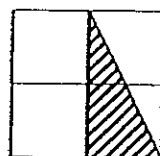
21. The diagrams below show 4 triangles, A, B, C and D, formed in the square grid. Which triangle is an isosceles triangle?
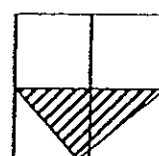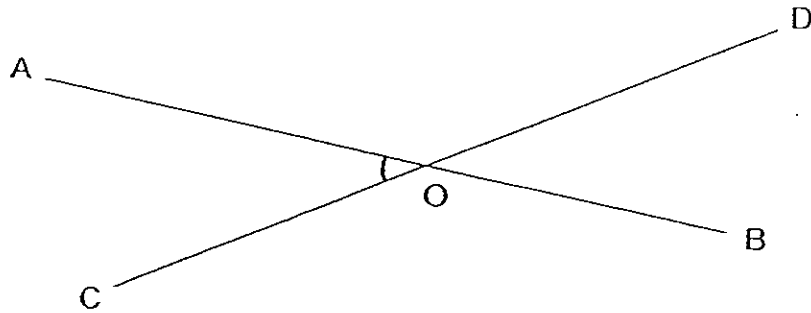

A   B   C   D

Ans: _____

22. In the diagram below, AB and CD are straight lines. Measure ∠AOC.

Ans: _____ 0

23. During a sale, a shop sold stickers at the price shown below.

Number of Sheets of Stickers	Price
First 10 sheets	$1 per sheet
Every additional sheet	$0.80 per sheet

Ming Yee bought 20 sheets of stickers. What was the average price of one sheet of stickers?
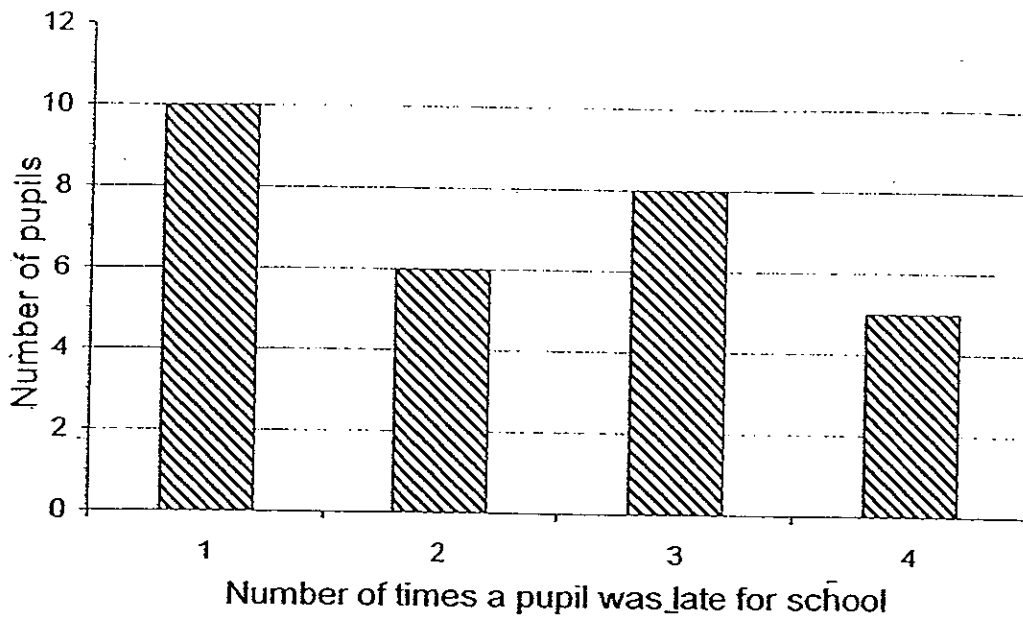
Ans: $_____

24. Complete the following figure to make it symmetrical about AB.
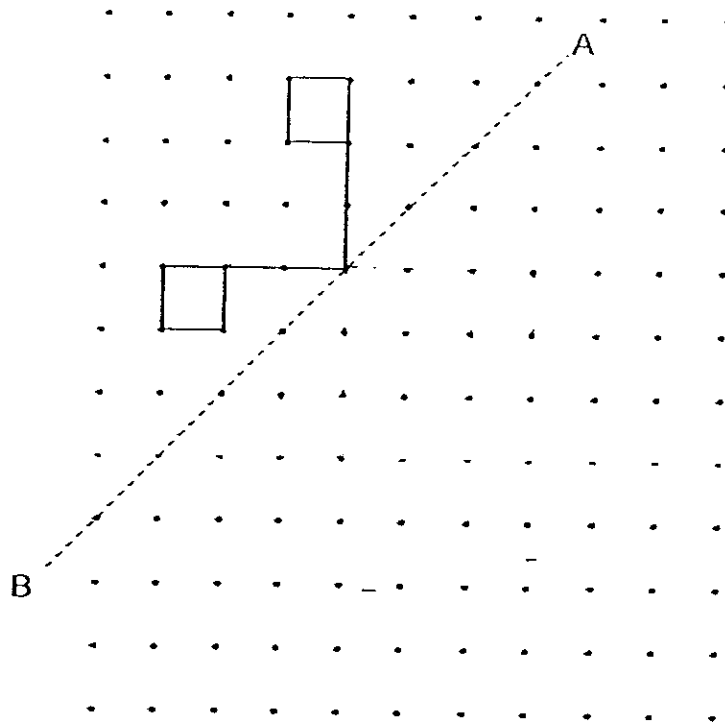
25. There are 2400 pupils in a school.

600 of them go to school by car.

What percentage of pupils go to school by car?

Ans: _____ %

26. The graph below shows the number of times pupils from class 6K were late for school in March.
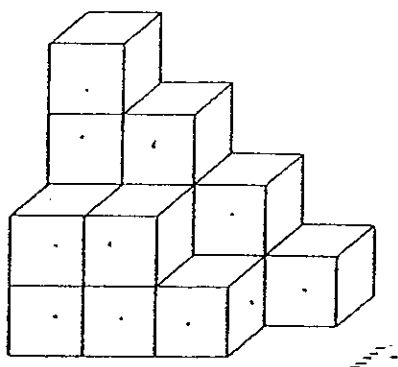

Number of times a pupil was late for school

Given that there were 40 pupils in class 6K, how many pupils were **not** late for school in March?

Ans: _____

27. 50% of A is equal to $\frac{2}{5}$ of B. If both numbers add up to 13.5, what is the difference between the numbers?
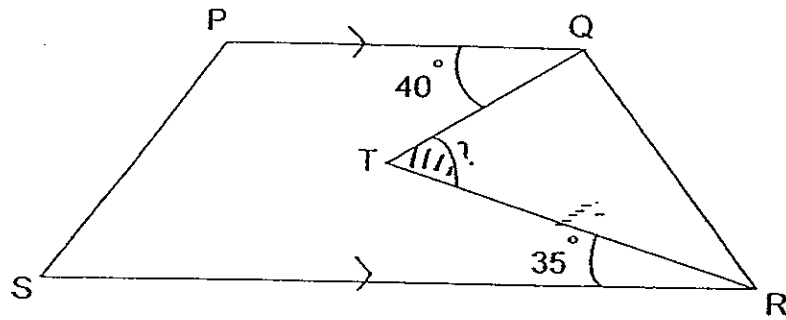
Ans: _____

28. The solid below is made up of 1-cm cubes. What is the volume of the solid?

Ans:_____cm³

29. Given that BC is one side of a triangle, construct triangle ABC such that CA = CB and ∠ACB = 70°.

30. In the figure below, PQRS is a trapezium and QTR is a triangle. Find ∠QTR.

Ans; _____ °

RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 2
2008
Paper 2

|		Class	Level
Your Score Out of **60** marks			
Highest score			
Average score			
Parent's Signature			

Name :_____ ( ) Class: P5_

Banded Class: P5_

24 October 2008   MATHEMATICS Att: 1 h 40 min

## Calculators are allowed to be used in this paper.

For question 1 to 18, show your working clearly in the space provided below each question and write your answer with suitable units in the spaces provided. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form. Marks will be awarded for relevant working. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

---

1. In the figure below, ABC is an isosceles triangle and BCD is a straight line.

    Find ∠EFC.
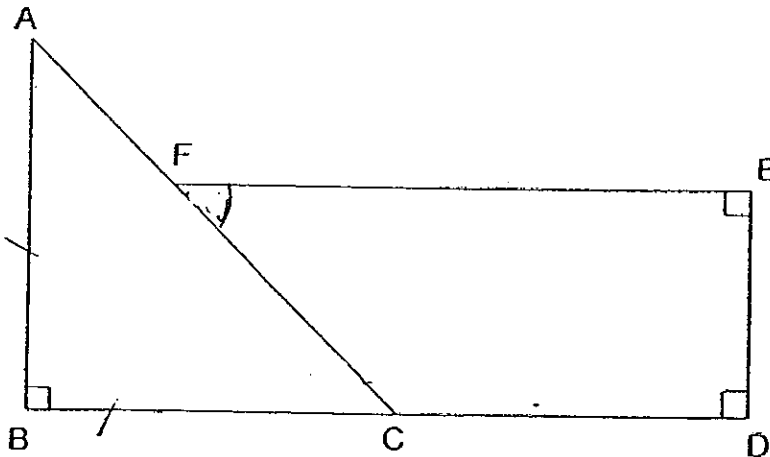
Ans: _____[2]

2. The graph below shows the amount of rainfall collected from January to June in 2007.
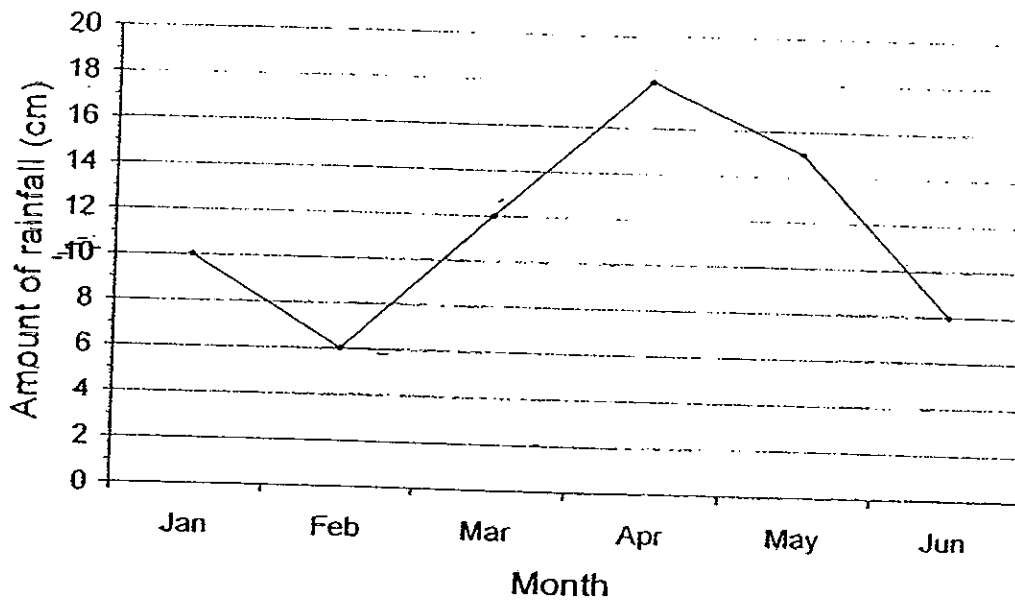
(a) Which month is the driest month?

(b) What was the decrease in the amount of rainfall from April to June?
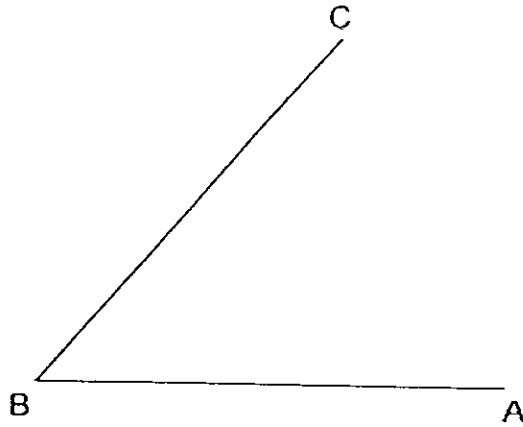
Ans: (a) _____ [1]

(b) _____ [1]

3. [ ] ÷ 7 + 7 x 7 = 65. What is the missing number in the box?

Ans: _____ [2]

4. The figure below shows two straight lines AB and BC.

(a) Lines AB and BC are two sides of a rhombus.

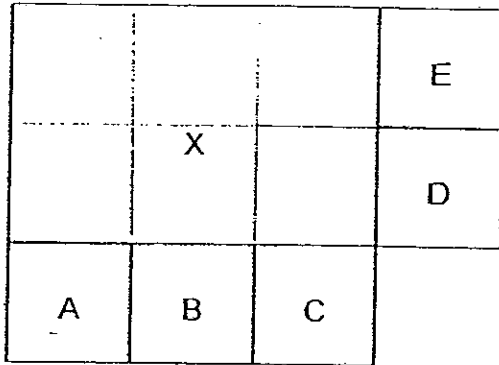Draw the rhombus ABCD by completing the figure below. [1]

C

B   A

(b) Measure and write down the size of ∠ABC.

Ans: (b) _____ [1]

5. The figure below is made up of 5 identical squares A, B, C, D and E and a rectangle X. The area of rectangle X is 114cm².
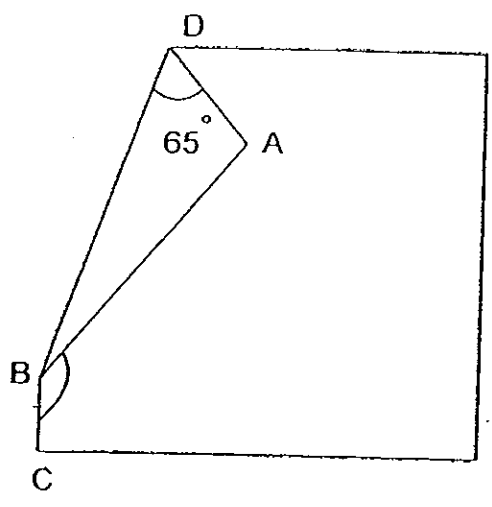   Find the area of square A.

Ans: _____ [2]

6. Ann and Ben had $66.75 together.
   After Ann spent half of her money and Ben spent $20.25, they had an equal amount of money left.
   How much money did Ben have at first?

Ans: _____ [3]

7. A square piece of paper is folded at corner A as shown below. Find ∠ABC.
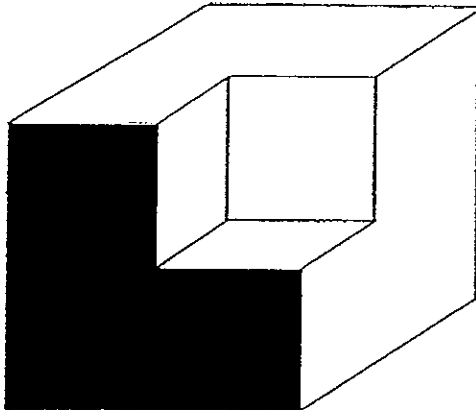

Ans: _____ [3]

8. May is 183 cm tall.

She is 25 cm taller than Helen and 7 cm shorter than Fanny.
Find the average height of these three girls.

Ans: _____ [3]

9. The volume of a wooden cube is 343 cm³.

If a small cube is cut off from it as shown in the figure below, the remaining volume is 279 cm³.

Find the area of the shaded side.

Ans: _____ [3]

10. Linda's father is 8 years older than her mother.

   Linda is 32 years younger than her father.

   The total age of Linda and her parents is 143 years.

   (a) How old is Linda?

   (b) How old is her mother?

Ans: (a)_____[3]

   (b)_____[1]

11. Lynn bought a book for $6.80.

She paid the cashier 14 coins which consisted of 20-cent coins and 1-dollar coins. How many of 1-dollar coins did Lynn give to the cashier?

Ans:_____5 [3]

12. The diagram below shows a rectangular container half-filled with water. When 4 identical metal balls are placed in the container, the water level rises to the brim.

— 432 cm³
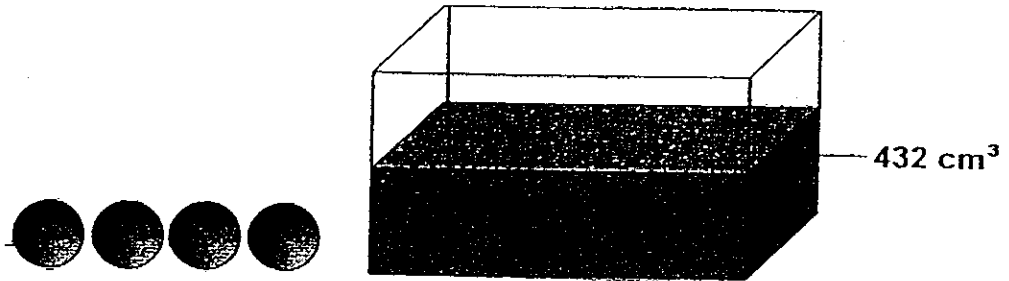
(a) Find the volume of one metal ball.

(b) When the water in the rectangular container is transferred to a cubical tank, the cubical tank is only 25% filled. Find the height of the cubical tank.
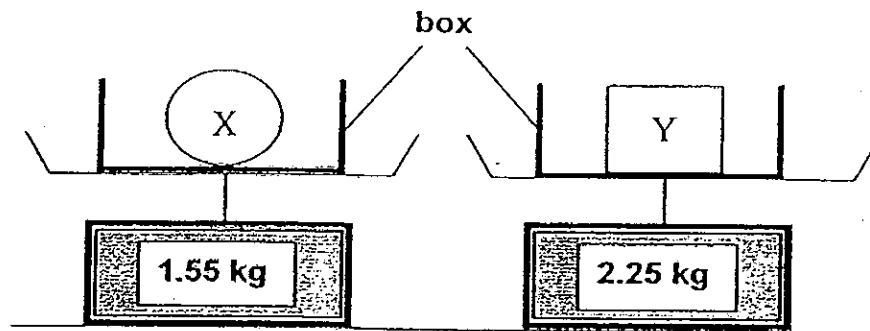
Ans: (a) _____ [2]

(b) _____ [2]

13. A fast food outlet charges $6.50 for a value meal and $4 for a kid's meal.

Last month, the outlet collected $11 610. Out of every 15 meals sold, 12 were value meals and 3 were kid's meals.

What was the total number of value meals sold last month?

Ans:_____[4]

14. The diagram below shows the mass of two identical boxes with objects X and Y placed in them respectively.

Given that object Y is three times as heavy as object X,

(a) Find the mass of object Y.

(b) Find the mass of an empty box. Express your answer in grams.

Ans: (a)_____[3]

(b)_____[2]

15. Mrs Tan spent 70% of her money on 2.5 kg of peanuts, 5 kg of grapes and 3.5 kg of berries.

    She found that she could buy another 2.5 kg of similar grapes and 1.75 kg of similar berries with the rest of her money.

    (a) What percentage of Mrs Tan's money was spent on 5 kg of grapes and 3.5 kg of berries?

    (b) If Mrs Tan wants to buy another 1 kg of similar peanuts, what percentage of her money would she spend?

Ans: (a) _____ [1]

(b) _____ [3]

16. The table below shows the result of the sale of tickets for the 2 performances staged by a school.

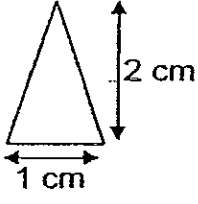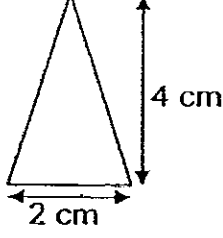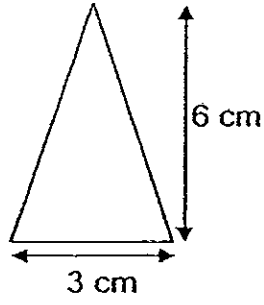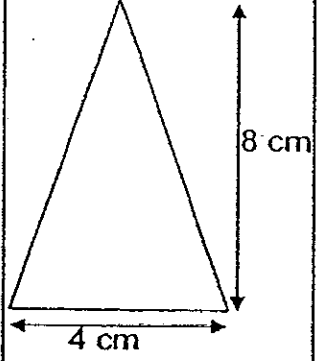| Types of Seats	Unit price	First Performance	Second Performance
VIP	$75	sold out	sold out
Standard	$40	sold out	sold out

In the first performance, 75% of the seats were Standard seats.

In the second performance, some VIP seats were added and the total number of seats increased to 1460.

Given that $21 900 more was collected in the second performance, how many percent of the seats in the second performance were VIP seats?

Ans: _____[4]

17. The diagrams below show triangles of different bases and heights.
Study the pattern and answer the questions that follow.

2 cm 1 cm	4 cm 2 cm	6 cm 3 cm	8 cm 4 cm
Figure 1	Figure 2	Figure 3	Figure 4

(a) What is the base of the triangle in Figure 8?

(b) What is the height of the triangle in Figure 10?

(c) Express the area of the triangle in Figure 77 as a fraction of the area of the triangle in Figure 99.

Ans: (a) _____ [1]

(b) _____ [1]

(c) _____ [3]

18. The number of members in a fitness club increased by 15% from Year 2006 to Year 2007. However, it decreased by 6% from Year 2007 to Year 2008. The number of members increased by 162 from Year 2006 to Year 2008.

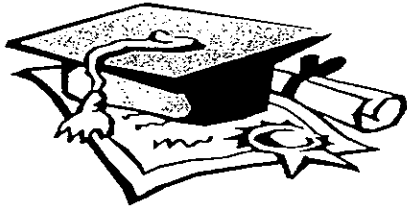(a) How many members were there in Year 2006?

(b) How many members were there in Year 2007?

Ans: (a) _____ [4]

(b) _____ [1]

-End of Paper-
Please check your work carefully.

ANSWER SHEET

EXAM PAPER 2008

SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : PRIMARY 5 MATHEMATICS

TERM   : SA 2

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

16)45   17)2.09   18)30   19)1kg

20)1.45m   21)Triangle B 22)35°   23)$0.90
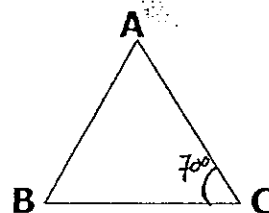
24)   25)25%   26)11 pupils
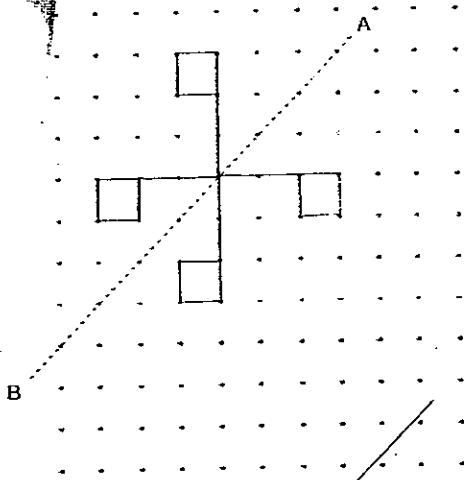
27)1.5   28)15cm₃   29)

30)75

Paper 2

1) $180° - 90° = 90°$
   $90° \div 2 = 45°$
   $180° - 45° = 135°$
   $360° - 135° = 90° - 90° = 45°$

2) a) February.
   b) $18 - 8 = 10cm$

3) $65 - 49 = 16$
   $16 \times 7 = 112$

4) a)

```
         6cm
    C ────────── D
   /            /
6cm/          /6cm
 /          /
B ────────── A
     6cm
```
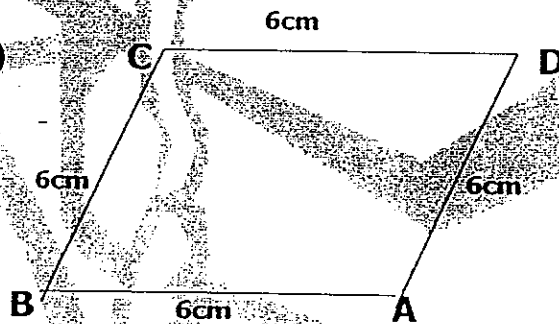
   b) $50°$

5) $114 \div 6 = 19$
   The area of square A is $19cm_2$

6) $66.75 - 20.25 = 46.50$
   $46.50 \div 3 = 15.50$
   $15.50 + 20.25 = 35.75$

7) $180° - 90° - 65° = 25°$
   $180° - 25° - 25° = 130°$

8)M→183
  H→183-25=158
  F→183+7=190
  190+158+183=531
  531÷3=177
  The average height of there girls is 177cm

9)?x?x?=343
  7x7x7=343
  7x7=49
  ?x?x?=64
  4x4x4=64
  4x4=16
  49-16=33
  The area of the shaded side is 33cm$_2$

10)a)32-8=24
      143-32-24=87
      L→82÷3=29
   Linda is 29 years old.
   b)29+24=53
   Her mother is 53 years old.

11)Lynn gave the cashier 5 1 dollar coins.

12)a)volume of tank 432x2=864
      4 metal ball→864-432=432
      1 metal ball→432 ÷4=108
      The volume of one metal ball is 108cm$_2$
   b)100÷25=4
      432x4=1728
      ?x?x?=1728
      12x12x12=144
      $\frac{1728}{144}$
      =12
   The height of tank cubical tank is 12cm

13)(12x6.50)+(3x4)=78+12=90

11610÷90=129

129x12=1548

The total number of value meal sold was 1548.

14)a)2u→2.25-1.55=0.7

1u→0.35

0.35x3=1.05

The mass of object y is 1.05kg.

b)1.55-0.35=1.2

1.2kg=1200

The mass of an empty boy is 1200g

15)a)60%

b)4%/74%

16)21900÷75=292

1460-292=1168

1168x25/100=292

292+292=584

$\frac{584 \times 100}{1460 \ 100}$=40%

17)a)Figure 8→8

The base of the triangle in Figure 8 is 8cm

b)Figure 1→2

2x10=20

The height of the triangle in figure 10 is 20cm

c)$\frac{49}{81}$

18)a)2000 members.

b)2300members.