



RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 1

2009

Paper 1

Name : _____ () Class: P6 ___
Math Class: P6 ___

12 May 2009 MATHEMATICS Att: 50 min

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

SECTION A (20 marks)

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.
No calculators may be used for this paper

1. The value of the digit 2 in 421 356 is _____

- (1) 200 000
- (2) 20 000
- (3) 2 000
- (4) 200

2. Arrange the following fractions in descending order.

$$\frac{5}{11}, \frac{1}{5}, \frac{5}{9}$$

- (1) $\frac{5}{9}, \frac{5}{11}, \frac{1}{5}$
- (2) $\frac{5}{11}, \frac{5}{9}, \frac{1}{5}$
- (3) $\frac{1}{5}, \frac{5}{11}, \frac{5}{9}$
- (4) $\frac{1}{5}, \frac{5}{9}, \frac{5}{11}$

3. Express 0.4 kg in grams.

- (1) 4 000 g
- (2) 400 g
- (3) 40 g
- (4) 4 g

4. What is the value of $5n + 6 - 2n - 3$ if $n = 8$?

- (1) 27
- (2) 33
- (3) 48
- (4) 59

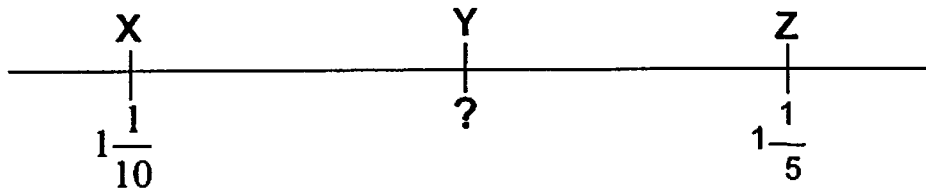
5. For every 4 girls who passed in a Science test, there were 2 girls who failed. Express the number of girls who passed the test to the total number of girls who sat for the test.

- (1) 1 : 2
- (2) 2 : 3
- (3) 3 : 1
- (4) 4 : 3

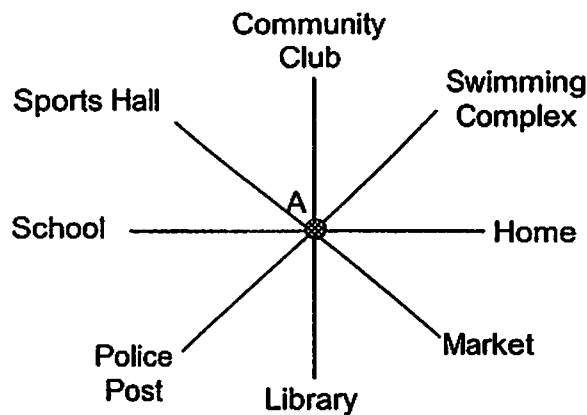
6. $2\frac{2}{3}$ is **not** equivalent to _____.

- (1) $1\frac{5}{3}$
- (2) $2\frac{4}{6}$
- (3) $\frac{16}{6}$
- (4) $\frac{26}{9}$

7. In the number line below, $XY = YZ$.
What is the value of Y?



- (1) 1.05
 (2) 1.10
 (3) 1.15
 (4) 1.20
8. Standing at Point A, William was facing his school at first.
When he turned 135° in an anti-clockwise direction, where will he be facing?



- (1) Community Club
 (2) Library
 (3) Market
 (4) Swimming Complex
9. 1 kg of rice cost \$7.50, 1 kg of sugar cost \$y less.
How much would 1 kg of sugar cost?
- (1) $\$(7.50 - y)$
 (2) $\$(y - 7.50)$
 (3) $\$(7.50 + y)$
 (4) $\$7.50y$

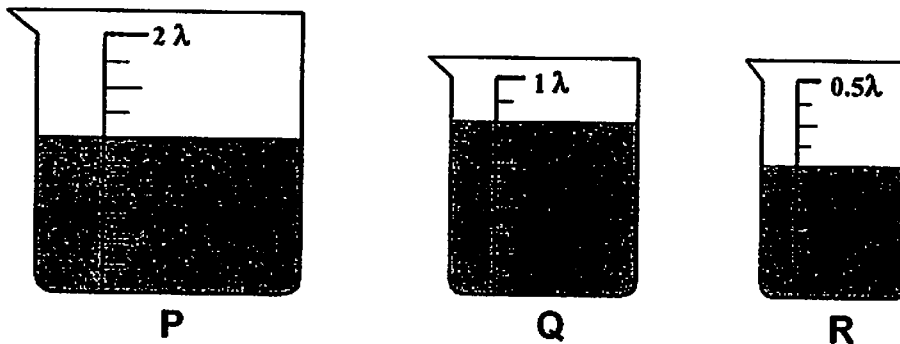
10. What percentage of 1 litre is 20 cm^3 ?

- (1) 5%
- (2) 2%
- (3) 20%
- (4) 50%

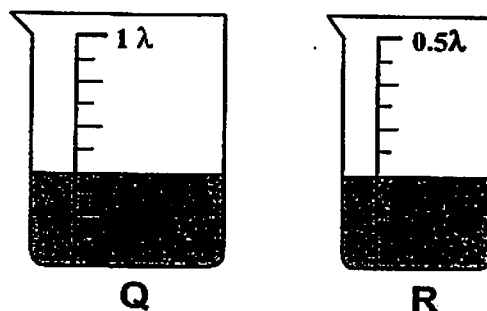
11. A number when divided by 6 gives a remainder of 1 and gives a remainder of 2 when divided by 5. What is the number?

- (1) 13
- (2) 25
- (3) 37
- (4) 43

12. At first, container P, Q and R contained water as shown below.



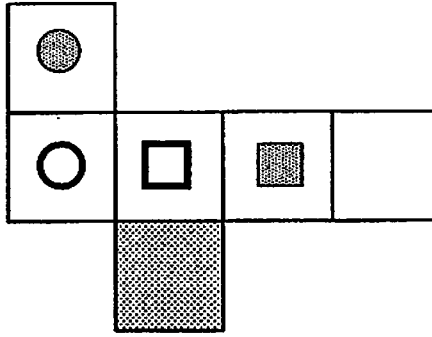
Some water from containers Q and R was poured into container P without any spilling over. The amount of water left in container Q and R is shown below.



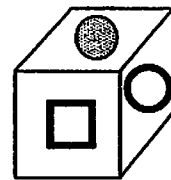
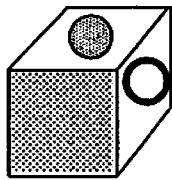
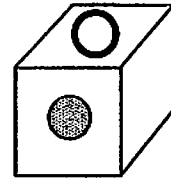
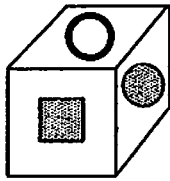
What would be the amount of water in container P?

- (1) 1.40 l
- (2) 1.60 l
- (3) 1.70 l
- (4) 1.80 l

13. The figure below shows the net of a cube.



Which of the following shows the correct cube made by the net?



14. Express 0.25% as a fraction

(1) $\frac{1}{4}$

(2) $\frac{1}{40}$

(3) $\frac{1}{400}$

(4) $\frac{1}{4000}$

15. Joshua cycled a total of 54 km in a race.

He covered $\frac{1}{3}$ of the distance in $\frac{1}{2}$ h and covered the remaining distance at an average speed of 24 km/h.

What was the average speed taken by Joshua to complete the whole race?

- (1) 60 km/h
- (2) 42 km/h
- (3) 36 km/h
- (4) 27 km/h

SECTION B (20 marks)

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. What is 3 hours after 11.30 p.m.? Give your answer in the 24 hour clock.

Ans: _____

17. Express $2\frac{3}{8}$ as a decimal.

Ans: _____

18. Which column can the number 101 be found in the table below?

A	B	C	D	E	F
	1	2	3	4	5
6	7	8	9	10	11
12	13	14	15	16	17
18	19	20	21	22	...

Ans: _____

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19. Peiling and Ashwini ordered a pizza.

Peiling ate $\frac{1}{5}$ of the pizza while Ashwini ate $\frac{1}{6}$ of the pizza.

What fraction of the pizza had both of them eaten?

Ans: _____

20. There are 6 red t-shirts, 8 black t-shirts and 5 white t-shirts in the drawer. If I close my eyes, how many t-shirts must I take from the drawer to be absolutely sure of taking a red t-shirt?

Ans: _____

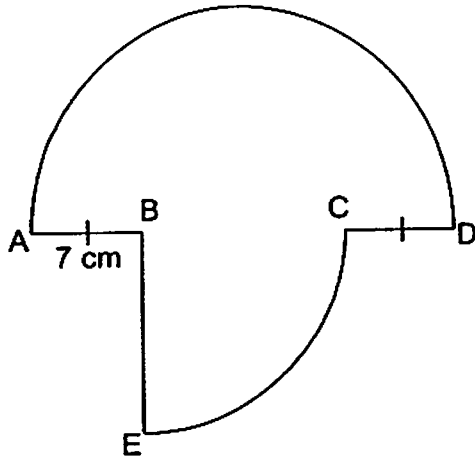
21. I am a 4-digit number. All my digits are different.

My first digit is $\frac{1}{6}$ of my last digit. My second digit is $\frac{1}{4}$ of my third digit.

What number am I?

Ans: _____

22. The figure below, not drawn to scale, is made up of a semicircle and a quadrant. $AB = CD = 7$ cm. The length of BE is twice the length of AB . Find the perimeter of the figure. Take π as $\frac{22}{7}$.



Ans: _____ cm

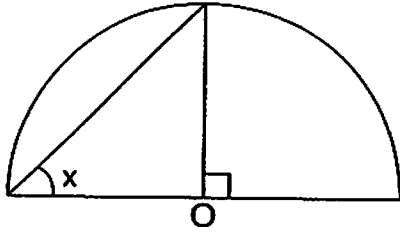
23. Mrs Tan bought a watermelon and two durians. The total mass of the fruits was 10 kg. Find the mass of the watermelon if the durians weighed y kg each.

Ans: _____ kg

24. A man can paint a house in 7 days. How long does it take 3 men to paint a similar house?

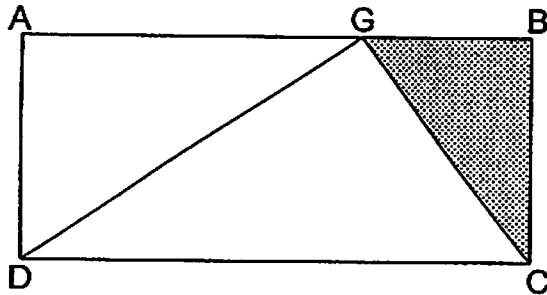
Ans: _____ days

25. The figure below is a semicircle with O as the centre.
Find $\angle x$.



Ans: _____°

26. In the diagram below, ABCD is a rectangle. AG is twice the length of GB.
What fraction of the rectangle is shaded?



Ans: _____

27. A and B are digits. What digits do A and B represent?

$$\begin{array}{r}
 4A \\
 \times A \\
 \hline
 BBA
 \end{array}$$

Ans: A = _____

B = _____

28. Observe the following pattern.

$$9 \times 9 - 8 \times 8 = 17$$

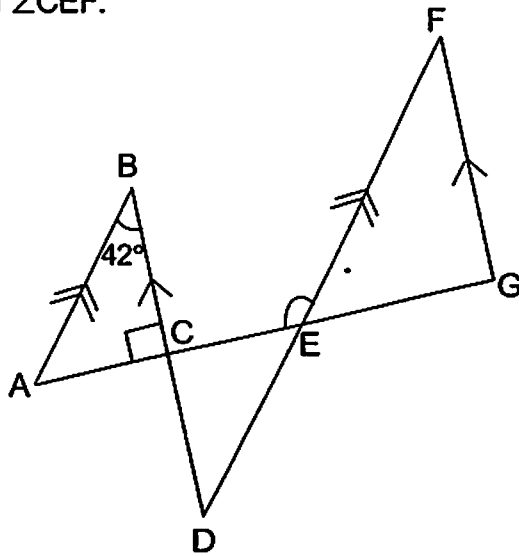
$$45 \times 45 - 44 \times 44 = 89$$

$$67 \times 67 - 66 \times 66 = 133$$

What is $203 \times 203 - 202 \times 202$?

Ans: _____

29. In the figure below, $\angle ABC$ is 42° .
Find $\angle CEF$.

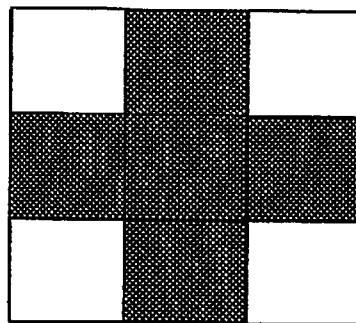


Ans: _____^o

..

30. Table A below consists of numbers from 2.5 to 30.0. Caili is given a plastic frame with 5 squares shaded that can cover exactly 9 squares of Table A.

2.5	3.0	3.5	4.0	4.5	5.0	5.5
6.0	6.5	7.0	7.5	8.0	8.5	9.0
9.5	10.0	10.5	11.0	11.5	12.0	12.5
13.0	13.5	14.0	14.5	15.0	15.5	16.0
16.5	17.0	17.5	18.0	18.5	19.0	19.5
20.0	20.5	21.0	21.5	22.0	22.5	23.0
23.5	24.0	24.5	25.0	25.5	26.0	26.5
27.0	27.5	28.0	28.5	29.0	29.5	30.0



Plastic frame

Caili puts the frame on some 9 squares on Table A.
 The sum of the 4 numbers that can be seen in the frame is 90.
 What is the smallest number that can be seen in the frame?

Ans: _____

-End of Paper-

Please check your work carefully ☺



RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 1

2009

Paper 2

Name : _____ () Class: P6 ___
Math Class: P6 ___

12 May 2009 MATHEMATICS Att: 1 h 40 min

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

For question 1 to 5 carry 2 marks each.
 Show your working clearly in the space provided for each question and write your answer in the spaces provided. Answers in fractions or ratio must be expressed in the simplest form.

All diagrams are not drawn to scale.
 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.
 Calculators can be used.

1. Mrs Tan used syrup and water in the ratio of 2 : 7 to make a drink.
 How many litres of drink did she make if she used 4 litres of syrup?

Ans: _____ / [2]

2. John is $(m + 2)$ years old now. 2 years ago, his cousin was twice his age.
 How old is his cousin now?

Ans: _____ years old [2]

3. At 10am, Andy drove from Town A to Town B at an average speed of 100km/h. At the same time, Jeremy drove from Town B towards Town A at an average speed of 95km/h. They met at 12.30pm.
Find the distance between Town A and Town B.

Ans: _____ km [2]

4. The ratio of Ann's amount of money to Jane's amount of money is 4 : 9.
How much more money does Jane have if Ann has \$240?

Ans: \$ _____ [2]

5. $\frac{2}{5}$ of 80km is the same as _____% of 320km.

Ans: _____ [2]

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

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

6. Dan and Ella shared a sum of money. When Dan's share increased from \$500 to \$605, the amount Ella received decreased by 15%.
How much did Ella receive at first?

Ans: _____ [3]

7. The average marks received by Jane, Alice, Susan and Mabel in a recent Science test was 76 marks.
Jane and Alice both got $8y$ marks each while Susan got half of Mabel's marks.
How many marks did Susan score for the test?
Express your answer in terms of y .

Ans: _____ [3]

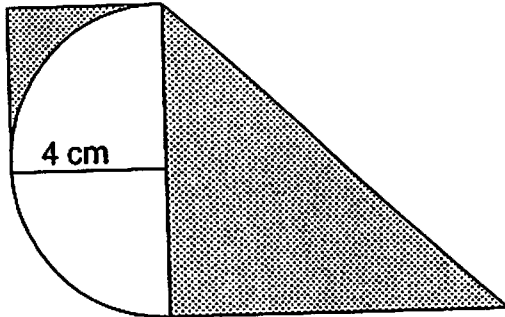
8. Jason had \$78 and Ben had \$25.
After Jason and Ben spent \$53 altogether on some games, Jason had 3 times as much money as Ben.
How much did Ben spend on the games?

Ans: _____ [3]

9. Tom's savings was $\frac{2}{3}$ of Jane's savings.
After Jane had spent \$180, her savings became $\frac{3}{4}$ of Tom's savings.
How much did Tom save?

Ans: _____ [3]

10. The diagram below shows a square, a semicircle and a right-angled isosceles triangle.
 Given that the radius of the circle is 4 cm, find the area of the shaded part.
 Take π as 3.14.



Ans: _____ [3]

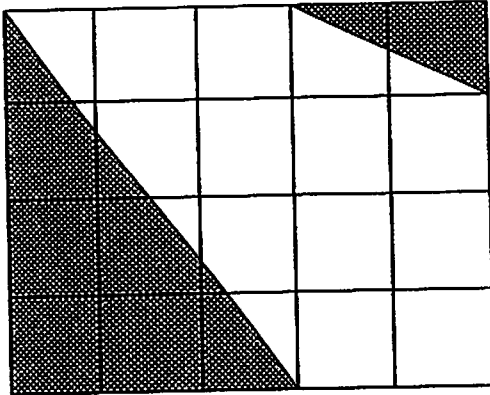
11. Jane was thinking of a fraction. The sum of its numerator and denominator was 34. After I added 98 to its denominator, the fraction became $\frac{1}{11}$.
 What was the fraction that Jane was thinking of?

Ans: _____ [3]

12. Alex, Ben and David went for a run but none of them completed the run.
Ben ran 5 times as far as Alex before he stopped.
David stopped 1 km before the finishing line and he ran 3 km less than twice the distance Ben ran.
The three of them ran 21 km, how long was the run?

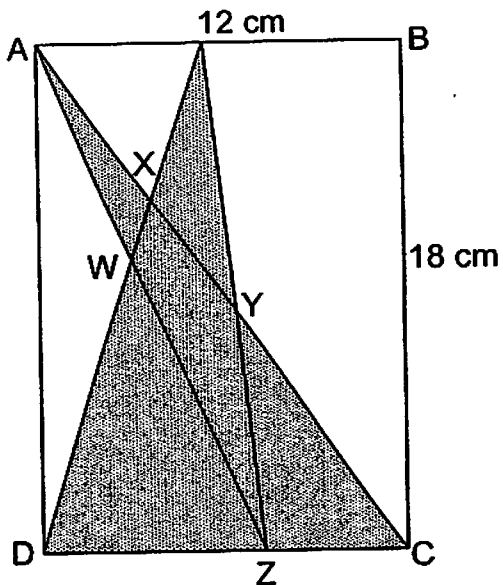
Ans: _____ [4]

- 13a. The figure below is made up of unit squares.
What fraction of the figure is shaded?



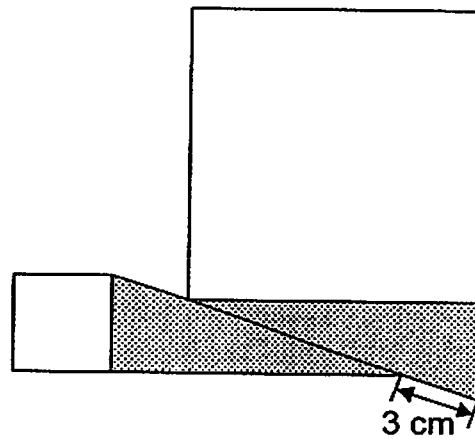
Ans: _____ [1]

- 13b. The figure below is not drawn to scale.
Given that the area of WXYZ is 40 cm^2 , find the area of the shaded part.



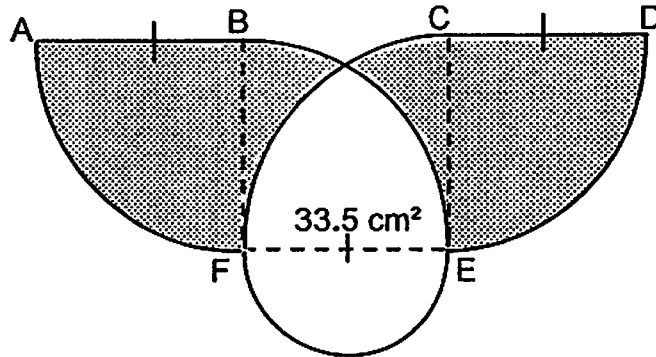
Ans: _____ [3]

14. The figure below is made up of two identical right-angled triangles, a small square and a big square.
 The perimeter of the shaded region is 50 cm, and the total area of the two unshaded squares is 254.5 cm^2 .
 Find the total area of the two shaded right-angled triangles.



Ans: _____ [5]

15. The figure is made up of 4 equal quadrants and one semicircle.
 $AB = CD = EF = 8$ cm. The total area of the unshaded parts is 33.5 cm^2 .
 Take π as 3.14 .



- Find the total perimeter of the shaded parts.
- Find the total area of the shaded parts.

Ans: a) _____ [1]

b) _____ [4]

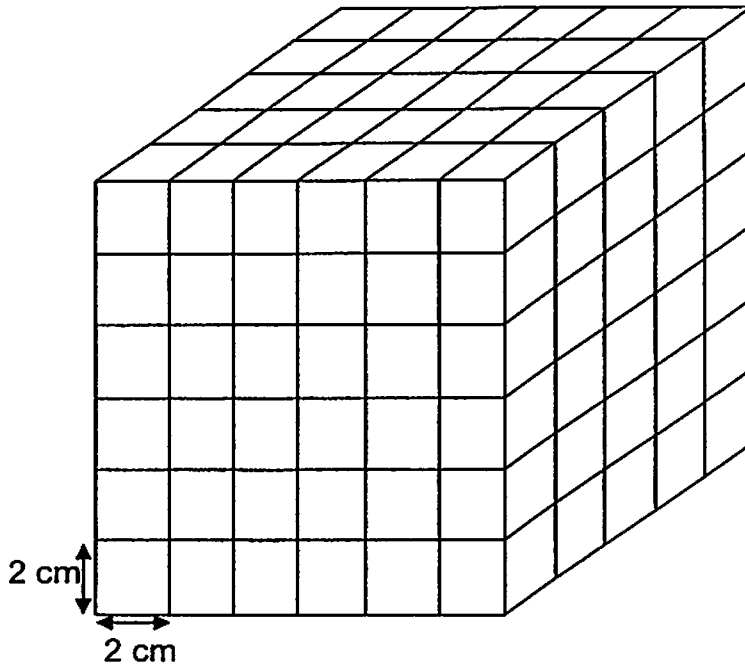
16. In a math competition, participants can obtain 4 possible award: Gold, Silver, Bronze and Participation. $\frac{3}{7}$ of the participants obtained Gold awards, $\frac{1}{4}$ of them obtained Silver awards, and $\frac{1}{6}$ of them obtained Bronze awards. Given that there were less than 100 participants taking the competition,

- (a) How many participants obtained the award for Participation?
- (b) How many more participants obtained Gold awards than Bronze awards?

Ans: (a) _____ [3]

(b) _____ [2]

17. The cuboid below is made up of 2-cm cubes.
All 6 faces of the cuboid are painted.



Find the ratio of the number of cubes with 3 painted faces to the number of cubes with 2 painted faces to the number of cubes without any painted faces in its simplest form.

Ans: _____ [4]

18. Container A contains 250 red marbles and 200 blue marbles.
Container B contains 600 red marbles and 150 blue marbles.
How many red and blue marbles must be moved from Container A to Container B such that 25% of the marbles in Container A are red and 75% of the marbles in Container B are red?

Ans: _____ [5]

-End of Paper-

Please check your work carefully ☺

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ANSWER SHEET

EXAM PAPER 2009

**SCHOOL : RAFFLES GIRLS' PRIMARY
SUBJECT : PRIMARY 6 MATHEMATICS**

TERM : SA1

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

- 16)0230 17)2.375 18)F 19)11/30 20)14
 21)1286 22)94cm 23)(10-2y). 24)2 $\frac{1}{3}$ days 25)45°
 26)1/6 27)A=5 B=2 28)405 29)132° 30)18.5

Paper 2

1)18L	2)M+M+2=(2M+2)
3)95x2=190 250+190+47.5=487.5km	4)4u→\$2.40 1u→\$60 5u→\$300
5)2/5x80=32 32/320x100%=10%	6)\$105→15% of Ella \$105÷15=\$7 \$7x100=\$700
7)76x4=304 8yx2=16y <u>304-16y</u> 3	8)\$103-\$53=\$50 \$50÷4=\$12.50 \$25-\$12.50=\$12.50

Page 1 to 2

page 1

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<p>9) $6u \rightarrow \\$180$ $1u \rightarrow \\$30$ $8u \rightarrow \\$240$</p>	<p>10) square $\rightarrow 4 \times 4 = 16$ $\frac{1}{4} \times 3.14 \times 4 \times 4 = 12.56$ $16 - 12.56 = 3.44$ $\frac{1}{2} \times 8 \times 8 = 32$ $3.44 + 32 = 35.44 \text{ cm}^2$</p>
<p>11) $11/23$</p>	<p>12) $21 \text{ km} + 3 \text{ km} = 24 \text{ km}$ $24 \text{ km} \div 16 = 1.5$ $1.5 \times 10 = 15$ $15 - 2 = 13 \text{ km}$</p>
<p>13) a) $7/20$ b) $\frac{1}{2} \times 12 \times 18 = 108$ $12 \times 18 = 216$ $216 - 40 = 176$ $108 - 40 = 68 \text{ cm}^2$</p>	<p>14) $50 - 6 = 44$ $44 \div 2 = 22$ $22 \times 22 = 484$ $484 - 254.5 = 229.5$ $229.5 \div 2 = 114.75 \text{ cm}^2$</p>
<p>15) a) $3.14 \times 16 = 50.24$ $50.24 + 16 = 66.24$ b) 184.2 cm^2</p>	<p>16) $13/84 = 13$ $3/7 \times 84 = 36$ $1/6 \times 84 = 14$ $36 - 14 = 22$ a) 13 b) 22</p>
<p>17) 3 painted faces $\rightarrow 8$ 2 painted faces $\rightarrow 44$ Without any painted faces $\rightarrow 48$</p> <p>8 : 44 : 48 2 : 11 : 12</p>	<p>18) 350</p>