RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2
MATHEMATICS (PAPER 1)
PRIMARY 5

Name: _____ ( )

Form class: P5 _____ Banded Math Class: P5 _____

Date: 29 October 2009 Duration: 50 min

Your Score (Out of 100 marks)			
Your Score (Out of 40 marks)			
		Banded Math Class	**Level**
PAPER 1 (40%)	**Highest Score**		
	Average Score		
TOTAL (100%)	**Highest**		
	Average Score		
Parent's Signature			

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. **NO** calculator is allowed for this paper.

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.

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1. A number when rounded off to 2 decimal places is 6.73.
   Which one of the following is the number?

   (1) 6.723

   (2) 6.727

   (3) 6.735

   (4) 6.738

   ( )

2. In $\frac{71}{9} = 7\frac{\square}{9}$, what is the missing number in the box?

   (1) 1

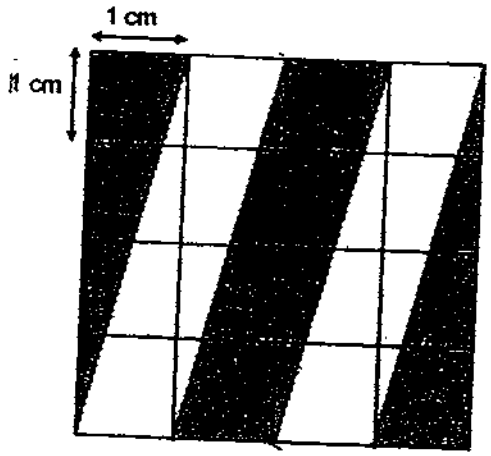
   (2) 2

   (3) 8

   (4) 18

   ( )

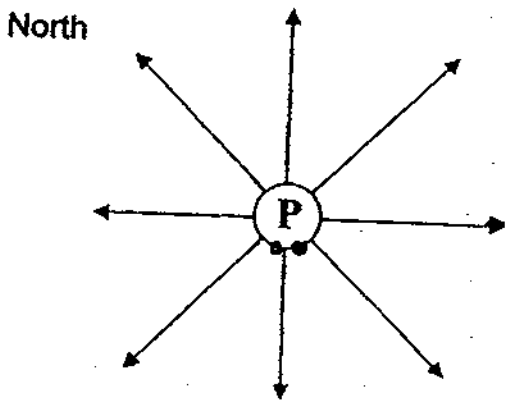
3. Find the area of the shaded region.



(1) 16 cm^2
(2) 12 cm^2
(3) 8 cm^2
(4) 4 cm^2

( )

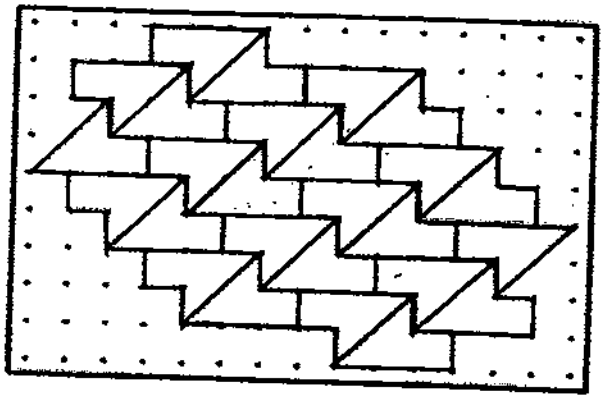
4. Jensen was standing at point P facing the South-West direction. He made a three-quarter turn to his right. Which direction was he facing?



(1) North-West
(2) West
(3) South-East
(4) East

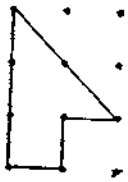
( )

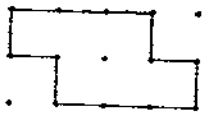
5. The pattern in the box below shows part of a tessellation.

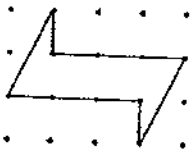


Which of the following is the unit shape used in the tessellation above?

(1) 

(2) 

(3) 

(4) 

( )

6. A water tank has 375 litres of water. How many 750-ml bottles of water can be filled with the water in the tank?

(1) 5
(2) 50
(3) 500
(4) 5000

( )

7. What is 5% of 240?

(1) 1.2
(2) 12
(3) 120
(4) 1200

( )

8. $12\frac{1}{50}$ expressed as a decimal is _____.

(1) 1.22
(2) 12.2
(3) 12.02
(4) 12.002

( )

9. The ratio of the number of red beads to the number of blue beads to the number of yellow beads is 2 : 3 : 4. The total number of beads is 180. How many beads are blue?

(1) 20
(2) 40
(3) 60
(4) 80

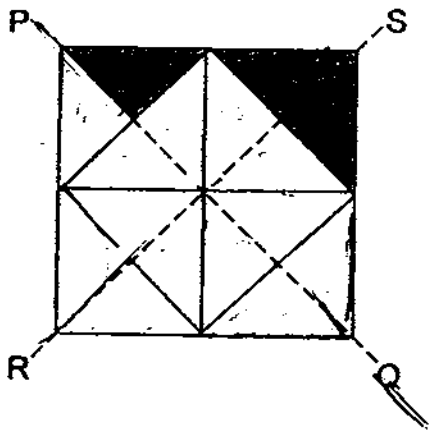
( )

10 The average age of Sharon and Ahmad is 6 years. The average age of Sharon and Mary is 8 years. The average age of Mary and Ahmad is 10 years. How old is Mary?

(1) 16
(2) 12
(3) 8
(4) 4

( )

11. The figure below consists of 16 identical triangles. How many more triangles must be **shaded** to complete the figure which has the dotted lines PQ and RS as lines of symmetry?



(1) 1
(2) 2
(3) 3
(4) 5

( )

12. What is the maximum number of 2-cm squares that can be cut out from a rectangular sheet of paper measuring 25 cm by 20 cm?

(1) 120
(2) 125
(3) 130
(4) 250

( )

13. Fill in the blank.

$$\frac{8}{25} \div 10 = \frac{1}{25} \times \square$$

(1) $\frac{4}{5}$
(2) $\frac{3}{5}$
(3) 8
(4) 80

( )

14. The ratio of the length of Square A to the length of Square B is 4 : 9. What is the ratio of the area of Square A to the area of Square B?

(1) 2 : 3
(2) 4 : 9
(3) 16 : 36
(4) 16 : 81

( )

15. A group of boys shared 56 apples equally among themselves. One of them did not want the apples. He gave the apples to the rest of the boys and each of them received one extra apple. How many boys in the group received a share of the apples at the end?

(1) 6
(2) 7
(3) 8
(4) 9

( )

SECTION B (20 marks)

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. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form.

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16. Arrange the following in ascending order:

$$0.738, \quad \frac{3}{5}, \quad 0.387, \quad \frac{1}{9}$$

Ans: _____

17. Joel has 40 fifty-cent coins. Andy has 15 twenty-cent coins.
How much more money does Joel have than Andy?

Ans: $_____

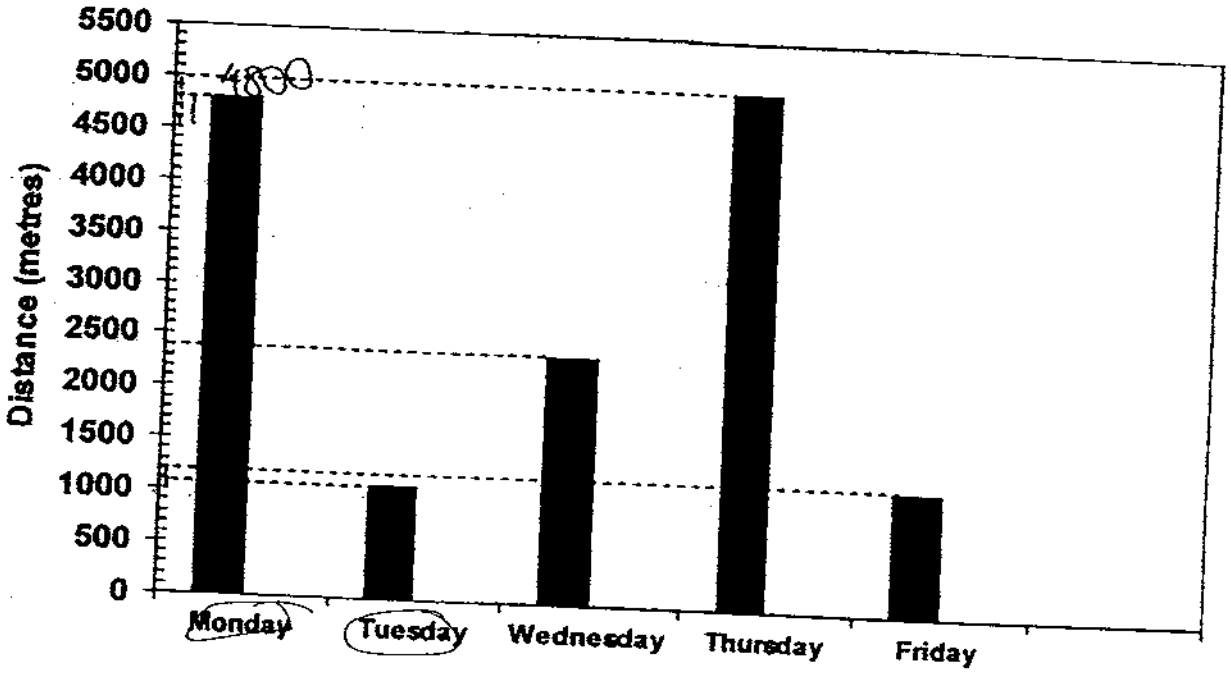
18. Minah had $5\frac{1}{3}\ell$ of water. She drank $\frac{3}{4}\ell$ of the water.
How much water did she have left?

Ans: _____ ℓ

19. Su Yin has $\frac{3}{4}$ m of ribbon. She cut the ribbon into 6 equal pieces. What is the length of each piece of ribbon?

Ans: _____ m

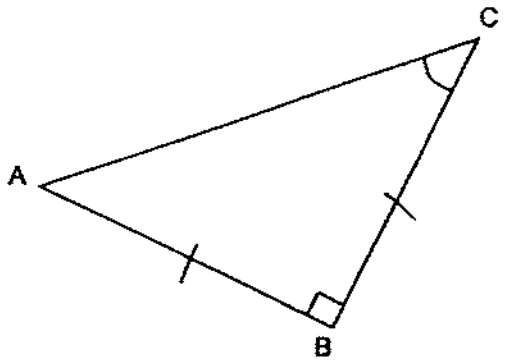
20. The graph below shows the distance jogged by Mr Wong each day.



What was the total distance covered by Mr Wong for Monday and Tuesday?

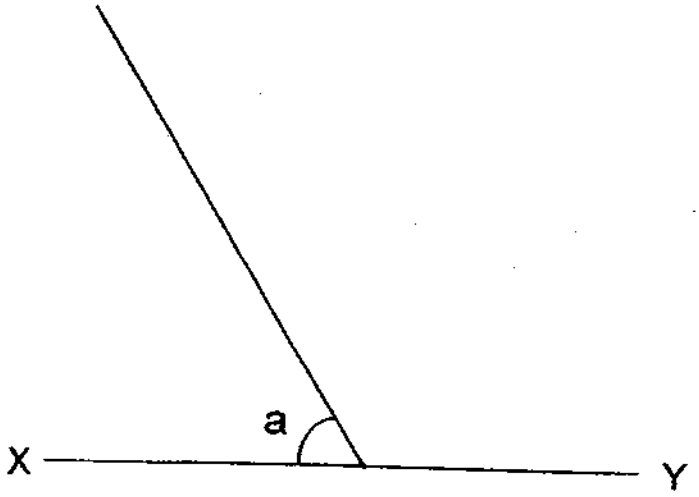
Ans: _____ m

21. Triangle ABC is an right-angled isosceles triangle. Find $\angle ACB$.



Ans: _____ °

22. The figure, on the right, is drawn to scale.
XY is a straight line.
Measure $\angle a$.

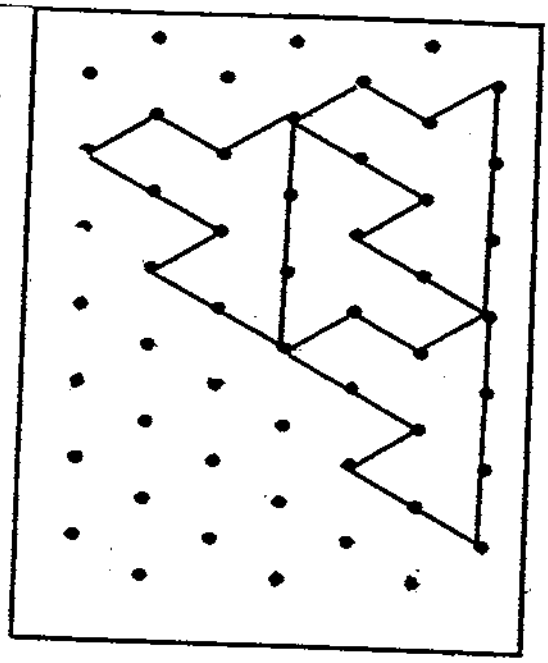


Ans: _____

23. Express 0.08 as a fraction in its simplest form.

Ans: _____

24. The pattern in the box shows a tessellation using a unit shape.
Extend the tessellation by drawing **two more** unit shapes in the space provided in the box.



25. There are 1800 workers in a factory.
450 of them are female.
What percentage of the workers in the factory are females?

Ans: _____%

Questions **26** to **30** carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the space 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.

KILLER QUESTION

26. Ali was given 0.18 litres of cough mixture by the doctor. He had to take 10 ml of it every 4 hours. How many days would he take to finish the cough mixture?

Ans: _____days

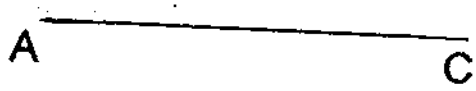
27. The average weekly savings of 10 girls is \$5. The average weekly savings of 5 boys is \$2. What is the average weekly savings of the 15 children?

Ans: \$_____

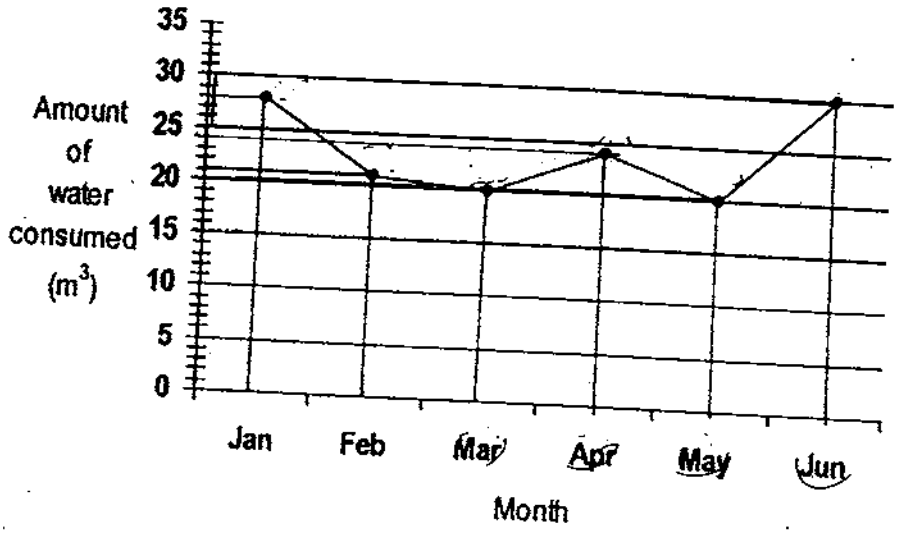
28. The volume of a cuboid is twice the volume of 4 similar cubes.
The length of each side of the cube is 4 cm.
What is the volume of the cuboid?

Ans: _____cm^3

29. Line AC is a side of a right-angled isosceles triangle. Complete the triangle ABC with $\angle ACB = 90^0$.



30. The line graph below shows the amount of water consumed by Mr Lee's family from January to June.



The amount of water used is charged at a rate of \$3 per m^3. What was the amount paid by Mr Lee's family for the utility bills from March to June?

Ans: \$_____

[redacted]

☺ Please check your work carefully ☺

Setters: Lee S.K., Wai S. H., Teo W. T.

RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2
MATHEMATICS (PAPER 2)
PRIMARY 5

Name: _____ ( )

Form class: P5_____ Banded Math Class: P5 _____

Date: 29 October 2009 Duration: 1 h 40 min

Your Score (Out of 60 marks)		
	Banded Math Class	**Level**
Highest Score		
Average Score		

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

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)

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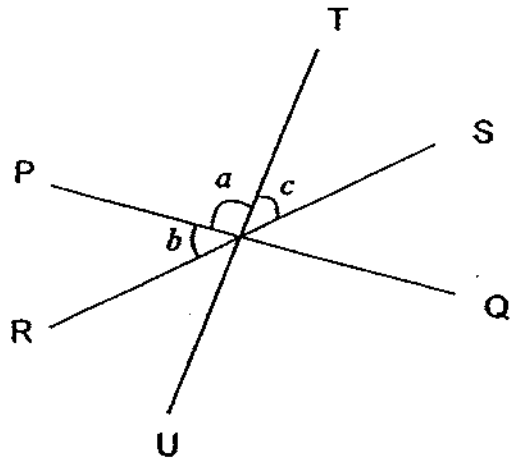
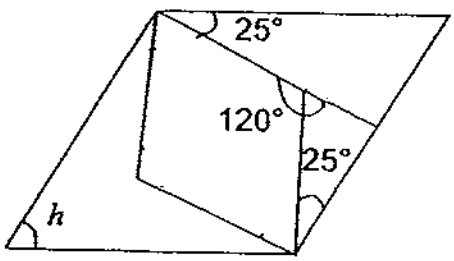
1. In the figure below, PQ, RS and TU are all straight lines.

   Given that $\angle a = 75°$ and $\angle b = \angle c$. Find $\angle c$.



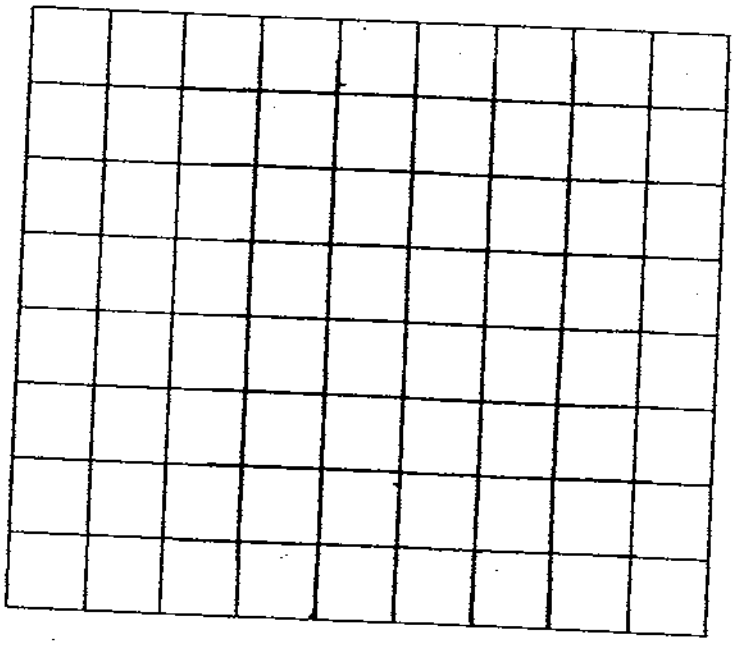
Ans: _____ [2]

2. The figure below is made up of 2 parallelograms. Find $\angle h$.



Ans: _____ [2]

3. Two sides of a parallelogram are drawn on the square grids below. Complete the parallelogram by drawing the other two sides of the parallelogram. [2]

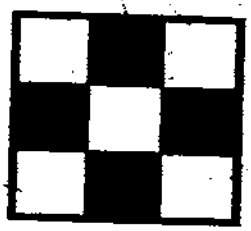


4. Table A below consists of numbers from 1 to 280.

Helen is given a plastic frame with 4 squares shaded that can cover exactly 9 squares of Table A.

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	...	...
...	...	...	...	...	...	...
...	...	...	270	271	272	273
274	275	276	277	278	279	280

Table A



Plastic frame

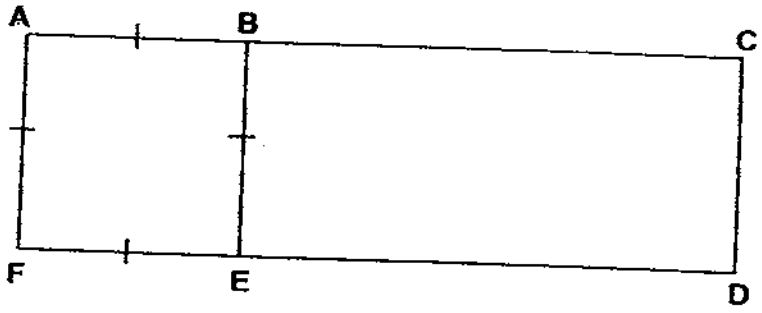
Helen puts the frame on some 9 squares on Table A.

The sum of the 5 numbers that can be seen in the frame is 995.

What is the greatest number that can be seen in the frame?

Ans: _____ [2]

5. The figure ACDF, with an area of 102 cm^2, is made up of square ABEF and rectangle BCDE.
The area of square ABEF is 36 cm^2.
What is the length of BC?



Ans:_____cm [2]

For 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 the brackets [ ] at the end of each question or part-question.

(50 marks)

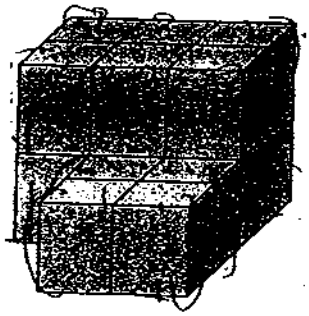
6. A box weighs 95.75 kg when it is filled with Solid A.

   The same box weighs 33.5 kg when it is filled with Solid B.

   Solid A is six times as heavy as Solid B, what is the mass of the empty box?

Ans: _____[3]

7. The figure below was made up of similar cubes glued together.



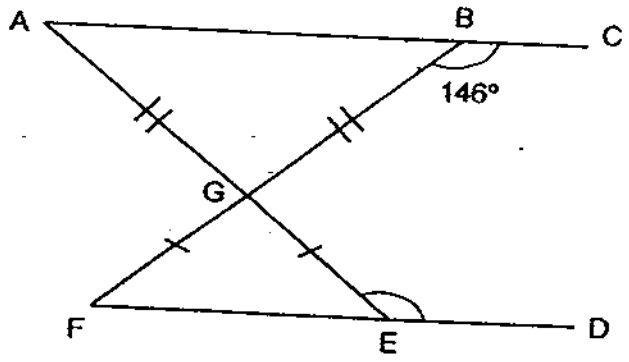
(a) How many cubes were used to made the figure above?

(b) Meiling painted all the faces of the figure in blue.
How many cubes had 3 of its faces painted blue?

Ans: a)_____[1]

b) _____[2]

8. In the diagram below, AGE, BGF, ABC and FED are straight lines. Find ∠GED.



Ans: _____[3]

9. Mr Tan's monthly salary is twice Mr Lee's.
His monthly savings is 6 times Mr Lee's.
Given that both of them spend $1000 monthly, how much money does Mr Tan earn?

Ans: _____[4]

10. Out of the 40 000 people at a concert, 30% of them were women, 10% of them were children and the rest were men.
Some women left the concert with half the number of children before it ended. As a result, the percentage of men increased to 75% of the number of people at the concert in the end.
How many women were at the concert in the end?

Ans: _____ [4]

11. There are three neon lights in a shop. The red light flashes every 6 minutes, the purple light flashes every 8 minutes and the yellow light flashes every 12 minutes. All three neon lights flash together when you walk into the shop. Including the flashes you see when you first step into the shop, how many times will you see at least 2 neon lights flash together if you are in the shop for 60 minutes?

Ans: _____ [3]

12. Mrs Chan had some money. She spent half of the money and $100 more on her shoes. She then spent half of the remainder and $100 more to buy a watch. She again spent half of the money that was left on a blouse and had $250 left. How much money did she have at first?

Ans: _____ [4]

13. Priya gave \$800 to her mother.

She then spent $\frac{5}{8}$ of her remaining money to buy a laptop.

If she still had $\frac{3}{10}$ of her money left, how much money did she have at first?

Ans: _____ [4]

14. The series of figures below are made up of dots and lines.

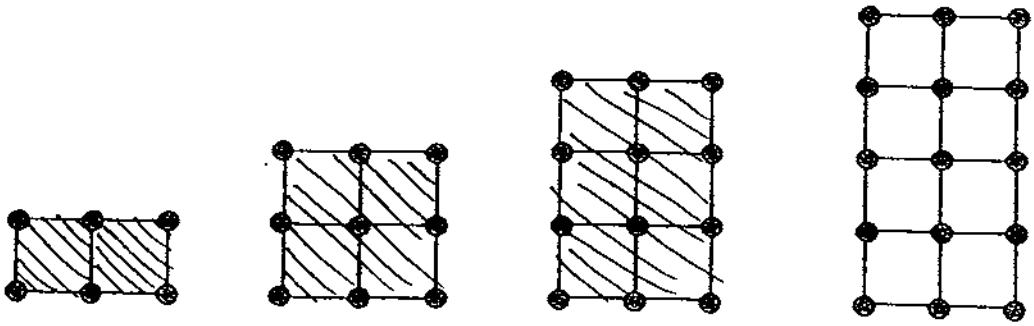


Figure 1 Figure 2 Figure 3 Figure 4

Figure	**1**	**2**	**3**	**4**
Sum of lines and dots	13	21	29	37

a) Find the sum of lines and dots in Figure 8.

b) Find the figure which has a sum of 205 lines and dots.

Ans: (a) _____ [1]

(b) _____ [2]

15. A bus driver charges $80 for every trip that is on time. When he is late, he can only charge $75.50 per trip.
In September, the bus driver earned $2359.50. For every 20 trips he made, 6 trips were late. How many trips were on time in September?

Ans: _____ [5]

16. The average height of a group of boys is 1.64 m.
When 2 new boys each of height 1.70 m joined the group, the average height became 1.65 m.
How many boys were in the group at the end?

Ans: _____ [4]

17. In a school, the ratio of the number of pupils who wear glasses to the number of pupils who do not wear glasses is 11 : 5.

$\frac{2}{3}$ of the boys and $\frac{7}{10}$ of the girls wear glasses.

What is the ratio of the number of boys to the number of girls?

Ans: _____ [5]

18. Mr Muhamad has 3 cubical fish tanks of different size.
The length of Tank A is twice the length of Tank B and the length of Tank B is twice the length of Tank C.
Mr Muhamad filled 20% of Tank A, 35% of Tank B and 40% of Tank C with water at first. He then decided to pour all the water from Tank B and Tank C into Tank A. What percentage of Tank A is filled with water?

Ans: _____ [5]

-End of Paper-
Please check your work carefully ☺

Setters: Lee S.K., Wai S. H., Teo W. T.

Answer Ke

EXAM PAPER 2009

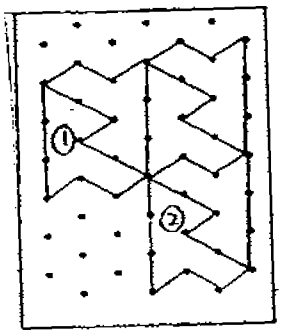
SCHOOL : RAFFLES GIRLS' PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

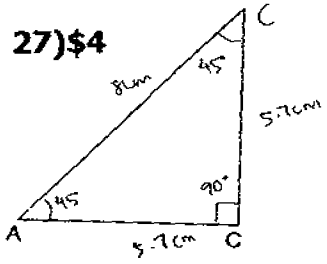
16)1/9, 0.387, 3/5, 0.738 **17)$17** **18)47/12** **19)1/8m**

20)5900m **21)45°** **22)60°** **23)2/25** **24)**



25)25% **26)25/6 days** **27)$4**

28)512cm3 **29)**



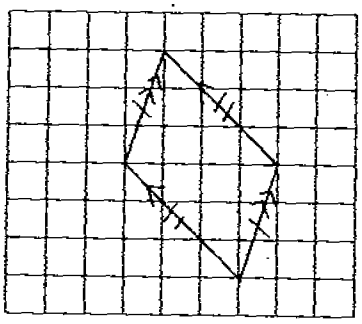
30)$282

Paper 2

1)180° -75° =105°
105° ÷2=52.5°
∠C is 52.5°

2)180° -120° =60°
25° +60° =85°
85° x2=170°
180° -85° =95°
180° -120° =60°
180° -60° -25° =95°
180° -95° =85°
180° -85° -25° =70°
∠ h is 70°

3)



4)207	5)11cm
6)Box +A=95.75kg Box +B=33.5kg 95.75kg-33.5kg=62.25kg 62.25kg÷5=12.45kg 33.5kg-12.45kg=21.05kg The box weighs 21.05kg	7)a)16 cubes b)9 cubes
8)180° -146° =34° 180° -34° -34° =112° 180° -112° =68° 68° ÷2=34° 180° -34° =146° ∠GED is 146°	9)$1000→4 units $1000÷4=$250 $250x6=$1500 $1500+$1000=$2500 Mr Tan earned $2500
10)2400→75% 75%-->3 quarter 2400÷3=800 1 quarter→800 20-4=16 16 units left Women left→3 units 3/20x40000=6000 There are 6000 left.	11)6 times
12)$250x2=$500 $500+$100=$600 $600x2=$1200 $1200+$100=$1300 $1300x2=$2600 She has $2600 left.	13)$800→2 unit 1 unit→$800÷2=$400 $400x8=$3200 $3200+$800=$4000 She has $4000 at first.
14)a)69 b)25	15)20-6=14 14x$80=$1120 $75.50x6=$453 $1120+$450=$1573 20 trips→14 tine 6 late 2359.50÷1573=1.5 1.5x14=21 trips.

16)1.70m→170m 170cmx2=340cm 1.65m-1.64m=1cm 1.70m-1.65m=5cm 5cm+5cm=10cm 10+2=12 There are 12 boys.	17)2B+7G=11 units 1B+3G→5 units 2B+6g→10 units 1 G→1 units 10G→10 units 1B→2 unit B→3x2=6 6:10→3:5 The ratio is 3: 5
18)25%	