SINGAPORE CHINESE GIRLS' PRIMARY SCHOOL

SECOND SEMESTRAL ASSESSMENT 2004

Name: _____ ( )

Class: Primary 5 _____

MATHEMATICS EM 1/2

BOOKLET A

15 questions

25 marks

Total Time For Booklets A and B: 2 h 15 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

Name: _____ _____ _____ ( )

Booklet A (25 marks)

Questions 1 to 5 carry 1 mark each. Questions 6 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 (1, 2, 3 or 4) on the Optical Answer Sheet.

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1. The numeral for six hundred and nineteen thousand, four hundred and twelve is _____.

(1) 690 421
(2) 619 420
(3) 619 412
(4) 609 412

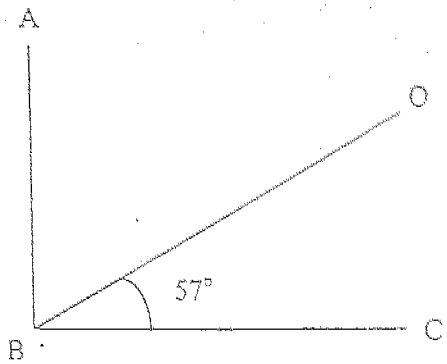
2. There are _____ fifths in $2\frac{2}{5}$.

(1) 12
(2) 10
(3) 9
(4) 4

3. How many five-cent coins are there in two dollars ?

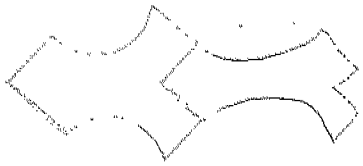
(1) 100
(2) 50
(3) 40
(4) 20

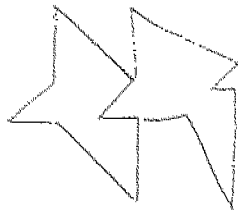
4. The figure below is not drawn to scale. $\angle ABC$ is a right angle and $\angle OBC$ is 57°. Find $\angle ABO$.



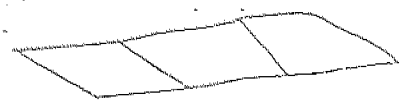
(1) 123°
(2) 43°
(3) 33°
(4) 23°

5. Which of the following unit shape cannot be tessellated?

(1) 

(3) 

(2) 

(4) 

6. Find the difference between 5 and 0.001.

(1) 4.9
(2) 4.99
(3) 4.999
(4) 4.989

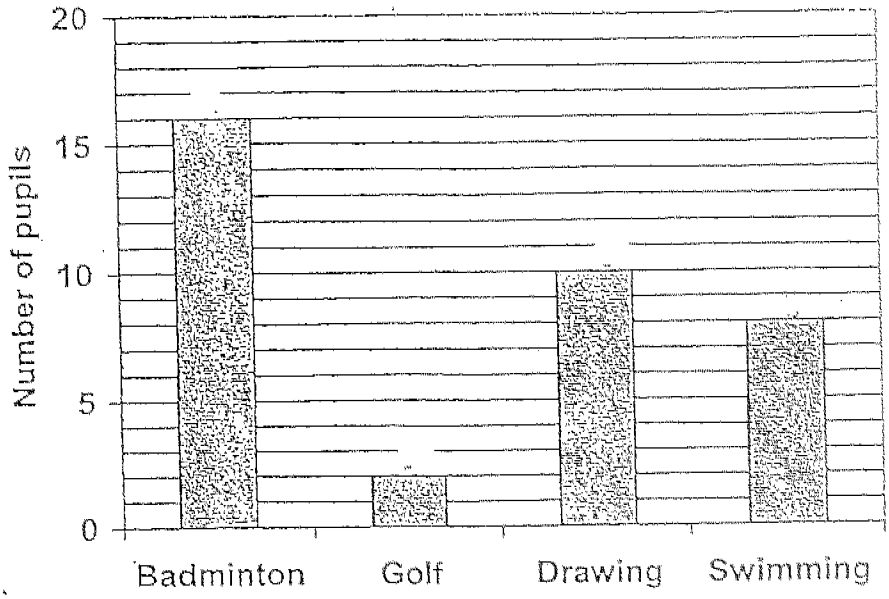
7. A pear weighs 550 g. A mango weighs twice as heavy as the pear. What is the total weight of 2 pears and 1 mango?

(1) 2.75 kg
(2) 2.2 kg
(3) 1.65 kg
(4) 1.1 kg

8. Norminah spent $1\frac{3}{4}$ h at the market and 2 h 20 min preparing lunch. If she left for the market at 9 am, at what time was lunch ready ?

(1) 11. 05 am
(2) 12. 05 pm
(3) 12.45 pm
(4) 1.05 pm

The graph below shows the hobbies of pupils in a class. Study the graph and answer Questions 9 and 10.



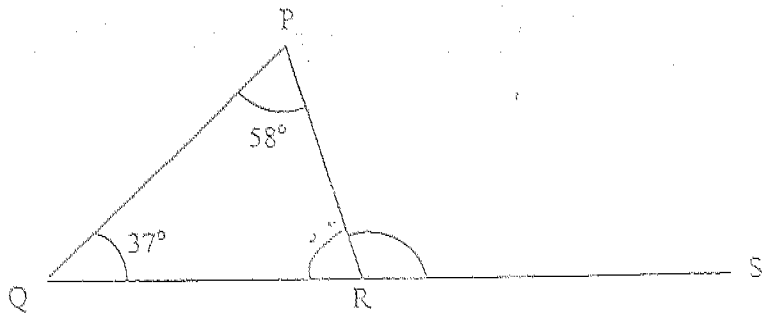
9. What is the total number of pupils in the class?

(1) 37
(2) 36
(3) 35
(4) 34

10. Badminton is _____ times as popular as Golf.

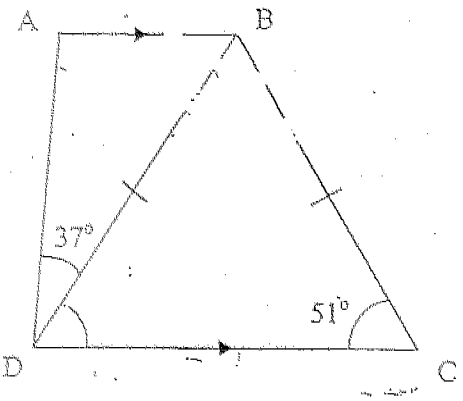
(1) 16
(2) 14
(3) 8
(4) 4

11. The figure below is not drawn to scale. $\angle PQR = 37°$ and $\angle RPQ = 58°$. Find $\angle PRS$.



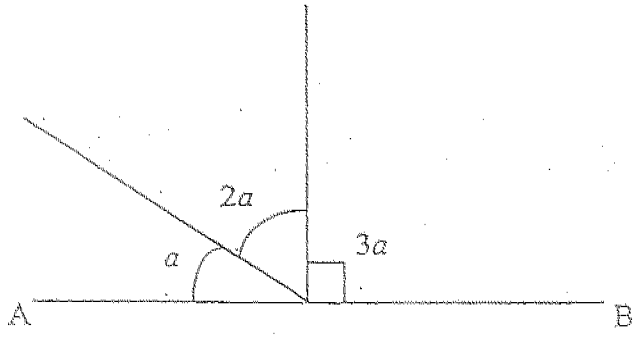
(1) 95°
(2) 116°
(3) 122°
(4) 143°

12. The figure below is not drawn to scale. ABCD is a trapezium and BCD is an isosceles triangle. Find $\angle BAD$.



(1) 78°
(2) 92°
(3) 129°
(4) 143°

13. The figure below is not drawn to scale. AB is a straight line. Find the value of a.



(1) 120°
(2) 90°
(3) 60°
(4) 30°

14. The average height of 3 boys is 1.49m. Tim is 1 m 50 cm tall while Tom is 136 cm tall. How tall is Jim?

(1) 143 cm
(2) 161 cm
(3) 286 cm
(4) 297 cm

15. The ratio of the number of cows to the number of goats at a farm is 7 : 9. How many animals are there altogether if there are 30 more goats than cows at the farm?

(1) 210
(2) 240
(3) 270
(4) 480

Name: _____ ( )

Do not write in this space

Booklet B (20 marks)

Questions 16 to 35 carry 1 mark each. Write your answers in the spaces provided. Give your answers in the units stated.

16. What is the highest common factor of 12 and 24?

Ans: _____

17. Round off 23 964 to the nearest hundred.

Ans: _____

18. The area of a rectanglar field is 120 m^2. If its breadth is 10 m, find its length.

Ans: _____ m

3

Do not write in this space

19. A bottle can hold 1.75 litres of water. A pail can hold 400 ml more. What is the capacity of the pail?

Ans: _____ litres

20. $\frac{1}{6}$ of a box of 48 balloons are defective. How many balloons are <u>not</u> defective?

Ans: _____

21. A basket of durians weighs 23.5 kg. A basket of papayas weighs 650 g lighter. What is the weight of the basket of papayas?

Ans: _____ kg

22. The total height of 5 similar books stacked together is 72 cm. What is the height of 1 book?

Ans: _____ cm

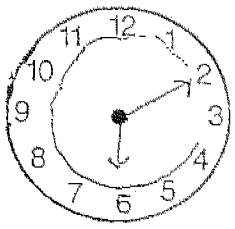
4

23. Shutri spent $17.25 on a book. She gave the cashier two five-dollar notes and one ten-dollar note. How much change did she receive from the cashier?

Do not write in this space

Ans: $_____

24. If the clock below is fast by 50 minutes, what is the correct time?



Ans: _____ am

25. 2-cm squares were cut from a piece of fabric.The fabric is 11 cm long and 10 cm wide. Find the maximum number of pieces that can be cut from it.

Ans: _____

26. The area of a square is 25 m^2. Find its perimeter.

Ans: _____ m

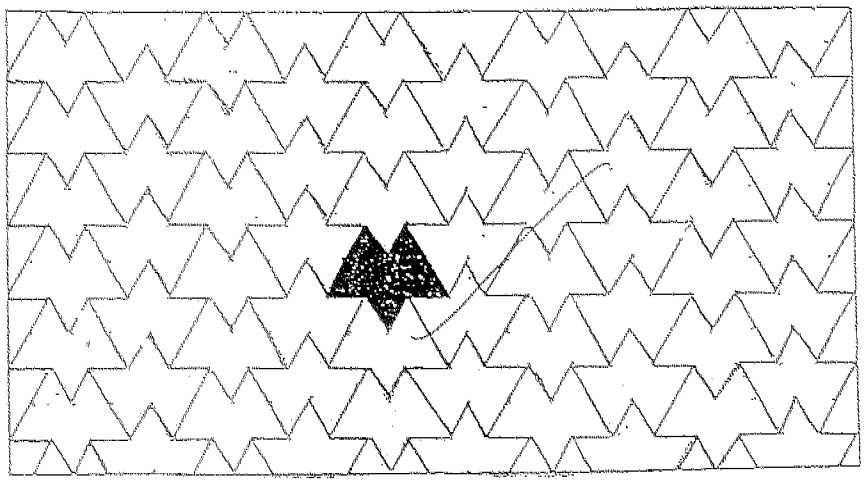
4

27. The volume of a cube is 27 cm^3. Find the area of one face of the cube.

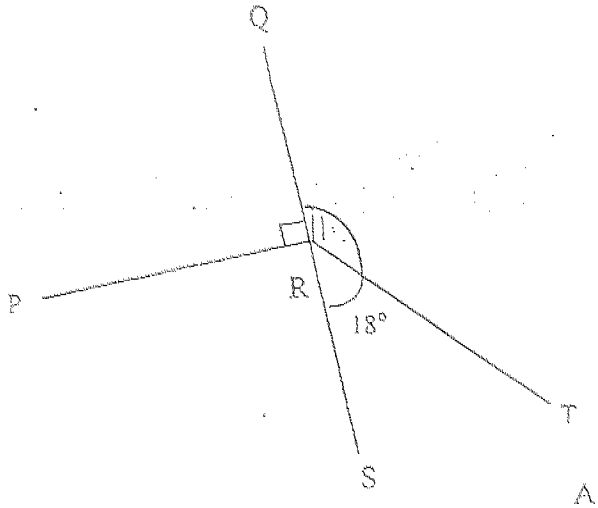
Do not write in this space

Ans: _____ _____ cm^2

28. Shade the unit shape in the tessellation below.



29. QRS is a straight line. ∠PRQ is a right angle. Find ∠QRT.

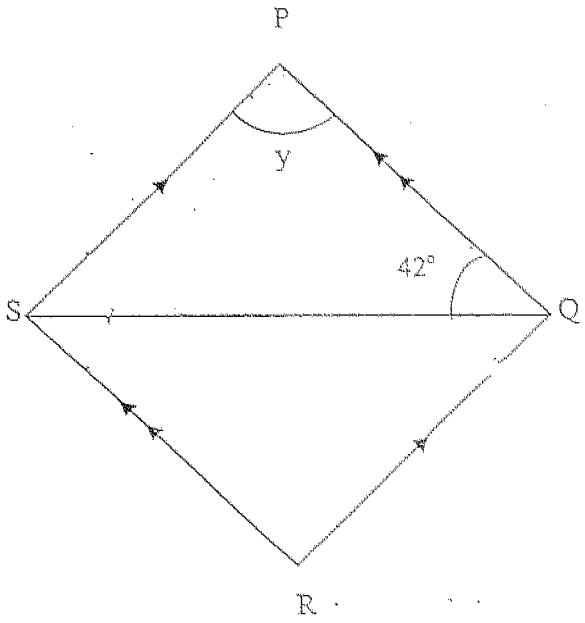


Ans: _____ _____ °

3

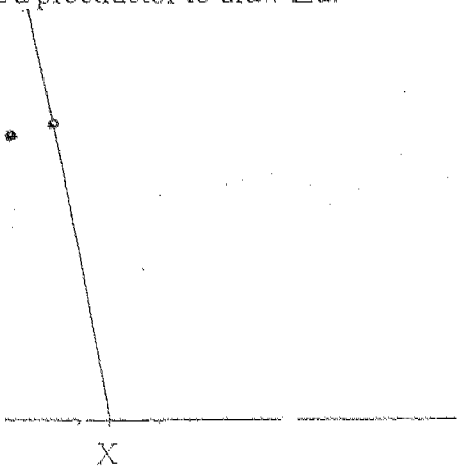
30. Figure PQRS is a rhombus. Find ∠y.

Do not write in this space



Ans: _____ °

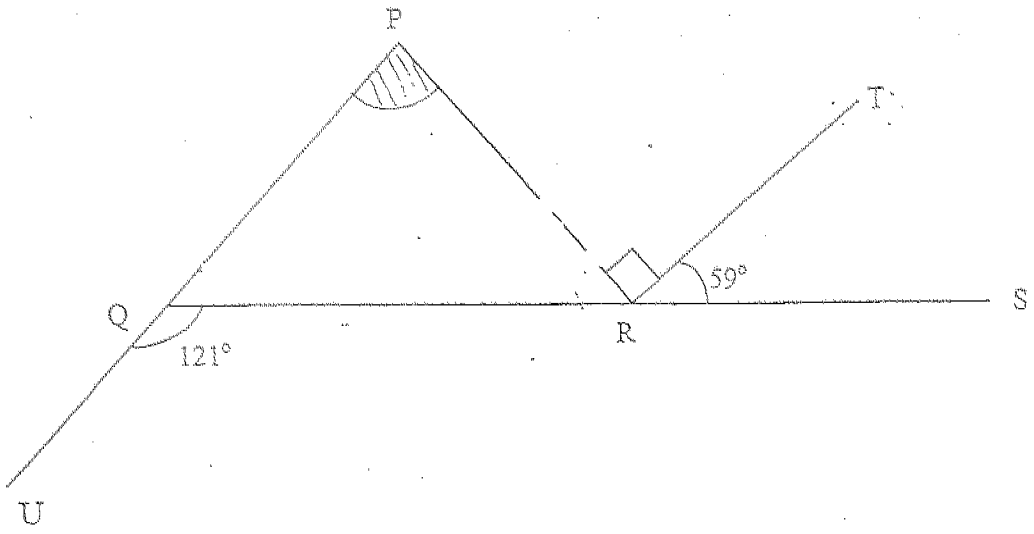
31. Join the marked end X of the line to the correct dot to get ∠u.
∠u = 260 °, use a proctractor to draw ∠u.



2

32. The figure below is not drawn to scale. QPR is a triangle. QRS and UQP are straight lines. Find ∠QPR.

Do not write in this space



Ans: _____°

33. There were 1 000 guests at a dinner. 66% of them were adults. How many children were there?

Ans: _____

2

34. The ratio of the number of toy cars to the number of toy trains is 3 : 5. If the total number of toys is 72, how many more toy trains than toys cars are there?

Do not write in this space

Ans: _____

35. A worker can pack 50 towels into a box in 15 minutes. How long will the worker take to pack 500 towels?

Ans: _____ h

2

Name: _____( ) Class: _____

Do not write in this space

Booklet B (55 marks)

For each question from 36 to 50, show your working clearly in the space below each question and write your answer in the spaces provided.

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

36. Eve has some marbles. Gillian has thrice as many marbles as Eve. Irene has half as many as Gillian. If they have 132 marbles altogether, how many marbles does Irene have?

Ans: _____ [2]

37. A mango cost 80 cents more than a pear. If Bala paid $5.40 for 3 mangoes and 2 pears, how much did each mango cost?

Ans: _____ [2]

4

38. Draw a triangle XYZ in which YZ = 5 cm, XZ = 5cm and $\angle YZX = 80°$. Find $\angle XYZ$.

Ans: _____ [2]

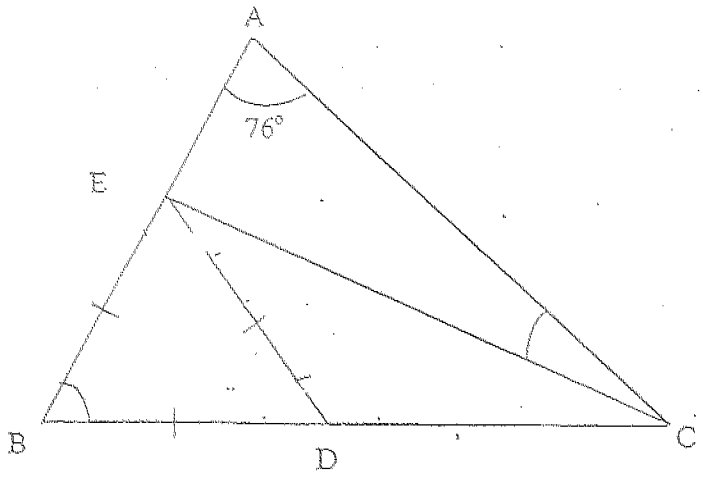
39. Mrs Lee baked 9 pies for a party. She gave half of the pies away and cut the rest into quarters. She kept 3 pieces of pie for herself and gave each child 1 piece of pie. How many children were at the party?

Ans: _____ [3]

5

40. AEB and BDC are straight lines. CDE is an isosceles triangle and EBD is an equilateral triangle. Find ∠ACE.

Do not write in this space

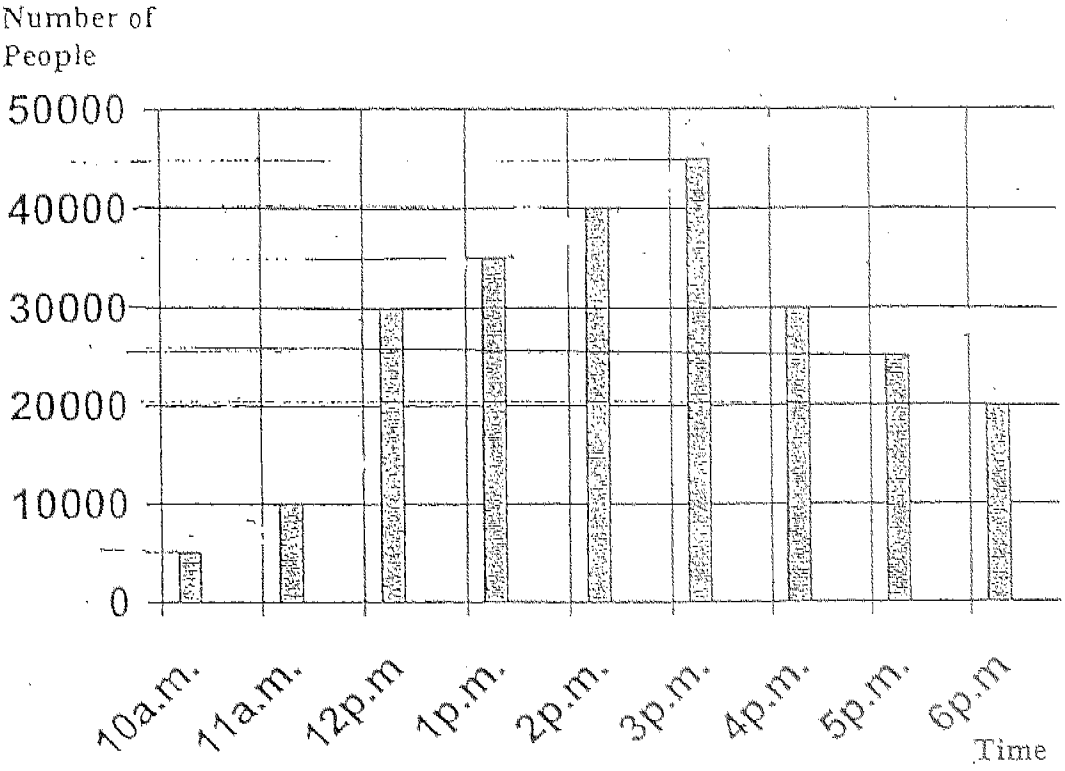


Ans _____ _____[3]

3

41. The graph below shows the number of people at the Expo Centre during the Warehouse Sale 2004.

Do not write in this space



a) The most popular 2-hour period was between _____ and _____

b) A count was done every hour. At the end of ~~8 hours~~, how many people had gone to the sale?

Ans: a) _____ [1]
b) _____ [2]

3

42. Mr Ahmad needed to pack 60 kg of rice. He packed 5.5 kg of rice into each sack and the remaindor equally into 5 plastic bags. If he had 9 sacks of rice, what was the weight of 1 plastic bag of rice ?

Do not write in this space

Ans: _____ [4]

4

43. A rectangular tank 20 cm long and 18 cm wide is half filled with water. The volume of water in the tank is 2 880 cm^3.

Do not write in this space

(a) Find the height of the tank.

(b) To fill up the tank, water from a flask and a bottle is poured in.
The volume of water from the flask is a quarter of the volume of water from the bottle.
Find the volume of water from the flask.

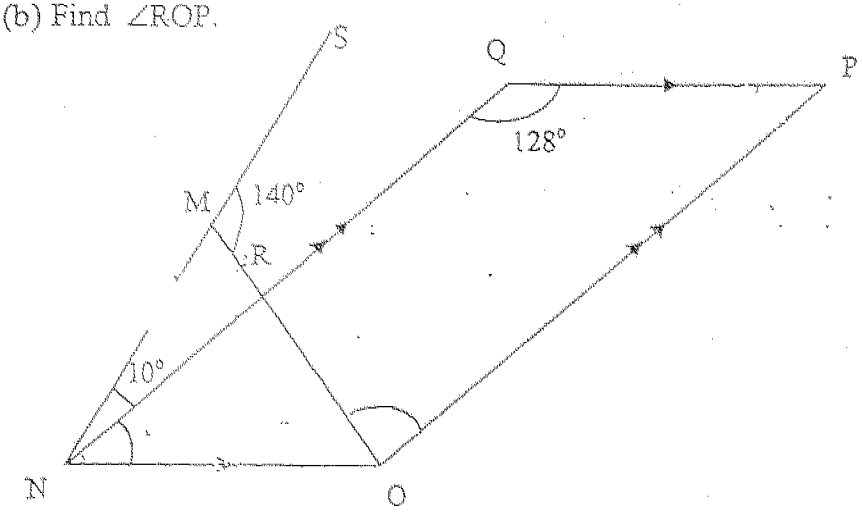
Ans: (a) _____ [2]

(b) _____ [2]

4

The figure below is not drawn to scale. MNO is an isosceles triangle. NOPQ is a parallelogram.

(a) Find ∠QNO.
(b) Find ∠ROP.



Do not write in this space

Ans: (a) _____ [1]

(b) _____ [3]

4

45. Siti had to sell 6 000 flowers. She sold half of them at 3 stalks for $10. Next, she sold half of the remainder at 5 stalks for $10 and the rest at $2 each.

Do not write in this space

(a) Find the amount of money Siti would have earned after she had sold all the flowers.

(b) If Siti had sold all the flowers at $2 each, how much more or less would she have earned ?

Ans: (a) _____ [2]

(b) _____ [2]

4

46. A farmer had some ducks and chickens. They laid a total of 3 000 eggs. Each duck laid half as many eggs as each chicken. The farmer had twice as many chickens as ducks.

Do not write in this space

(a) Find the total number of eggs laid by the chickens.

(b) If the farmer had 20 ducks and each laid one egg a day, how long did it take him to collect 1 000 duck eggs?

Ans: (a) _____ [3]

(b) _____ [1]

4

47. Faladah bought 1 pen and 3 pencils and had $3 left.
If she had purchased 1 pen and 5 pencils, she would have no money left.

Do not write in this space

(a) How much did each pencil cost?

(b) At another stationery shop, the pencils were sold at the same price as the first. Faladah could only buy 7 pencils or only buy 5 pens with the the amount of money she had.
What is the difference in the price of one pen between the first shop and second shop?

Ans: (a) _____ [2]

(b) _____ [3]

5

48. The ratio of the number of red T-shirts to the number of blue T-shirts to the number of yellow T-shirts is 2 : 3 : 5.

Do not write in this space

Alice wants to pack all the T-shirts into one box. If she packs only red and blue T-shirts into the box, she still has space for 5 more T-shirts.

If she packs only blue and yellow T-shirts, she would not be able to pack in 10 T-shirts.

(a) How many T-shirts can that one box hold?

(b) Alice buys 2 more red T-shirts and 2 more yellow T-shirts. Find the new ratio of the number of yellow T-shirts to the total number of T-shirts .

Ans : (a)_____ [2]

(b)_____ [3]

5

49. Leo brought his nieces and nephews cycling. They rented two racers and one mountain bike. They spent $2\frac{1}{2}$ hours cycling and returned the equipment at 7.15 pm.

Do not write in this space

(a) At what time did they rent the equipment ?

(b) Find the amount that Leo had to pay.

Opening Hours : 9 am ---- 7 pm everyday		
Type of Equipment	Racers	Mountain Bikes
First half hour or part thereof	$2.50	$2.00
For every subsequent hour or part thereof	$1.50	$1.00
Late Returns: (after 7pm)	**A surcharge of $2.00 per equipment for every subsequent half hour or part thereof.**	

Ans (a) _____ [1]

(b) _____ [4]

5

50. There were some apples and oranges and 12 pears in Box A. There were four times as many oranges as there were pears. Apples made up 20% of the fruits in Box A.

Do not write in this space

(a) Find the total number of fruits in Box A.

(b) Box B contained only apples. 10% of the apples in Box B were rotten so the good apples were transferred to Box A. Now apples made up 80% of the fruits in Box A. Find the total number of apples that were in Box B at first.

Ans: (a) _____ [2]

(b) _____ [3]

5

--END OF PAPER--

SINGAPORE CHINESE GIRLS PRIMARY SCHOOL
SECOND SEMESTRAL ASSESSMENT 2004
PRIMARY 5 MATHEMATICS

SA2

1) 3

2) 1

3) 3

4) 3

5) 1

6) 3

7) 2

8) 4

9) 2

10) 3

11) 1

12) 2

13) 4

14) 2

15) 2

16) 12

17) 24000

18) 12

19) 2.15

20) 40 balloons

21) 22.85

22) 14.4

23) $ 2.75

24) 5.20

25) 25 pieces of fabric

26) 20

27) 8

28) 

29) 162^{o}

30) 96

31)

32) 90

33) 340 children

34) 18 more toy trains

35) 2.5

36) 36 marbles

37) $ 1.40

38) 50^{o}

39) 15 children

40) 14^{o}

41) a) 1 p.m. to 3 p.m.

b) 240000 people

42) 2.1 kg

43) a) 16 cm

b) 576 cm^{3}

44) 52^{o}

b) 50^{o}

45) a) $ 16000 b) Earned less $ 4000

46) a) 2400 eggs b) 50 days

47) a) $ 1.50 b) 90¢

48) a) 30 T-shirts b) 122

49) a) 4.45 p.m. b) $ 21

250 apples