AI TONG SCHOOL

2004
SEMESTRAL ASSESSMENT 1
PRIMARY (6)

MATHEMATICS

DURATION : 2 h 15 min

DATE: 14 MAY 2004

INSTRUCTIONS
Do not open the booklet until you are told to do so.
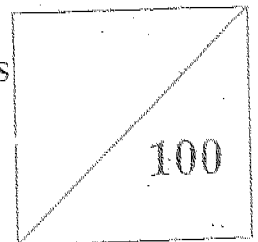Follow all instructions.
Answer all questions.

Name : _____ (   )

Class : Primary _____

Parent's Signature : ____ _____

Date : _____

Marks

100

Booklet A
Section A (25 marks)

Questions 1 to 5 carry 1 mark each.
Questions 6 to 15 carry 2 marks each.
For each question, 4 options are given. Choose the correct answer (1, 2, 3 or 4)
and shade the correct oval on the OAS.

1. If $\frac{1}{8}$ of a number is 20, what is twice this number?

   (1) 160
   (2) 320
   (3) 480
   (4) 640
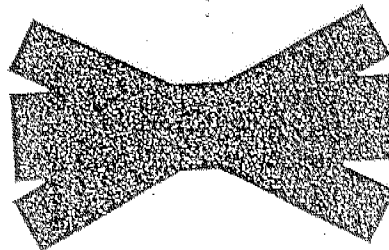
2. Which one of the following has the same value as $3 + \frac{2}{25}$?

   (1) 3.02
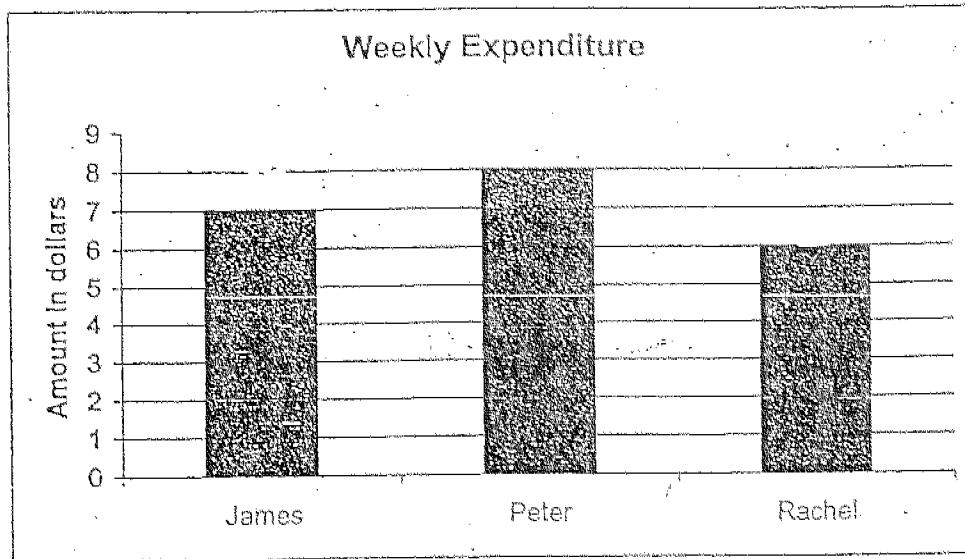   (2) 3.2
   (3) 3.08
   (4) 3.8

3. 10040 m = _____ km

   (1) 1.004
   (2) 10.04
   (3) 100.4
   (4) 1004

4. How many lines of symmetry are there in the figure below ?

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

5. The graph below shows the weekly expenditure of three children, James; Peter and Rachel. If their weekly allowance is $10 each. What is their total savings?

Weekly Expenditure

(1) $9
(2) $18
(3) $21
(4) $30

6. Mrs Cheng bought 2 mangoes and 6 oranges for $7.40. A mango costs 50¢ more than an orange. How much did she pay for each orange?

(1) $0.60
(2) $0.70
(3) $0.80
(4) $0.90

7. Express 45¢ as a percentage of $1.80

(1) 2.0%
(2) 2.5%
(3) 20%
(4) 25%

2

8. $6.3 \div 1000 = \boxed{} \div 10$

What is the missing number in the box ?
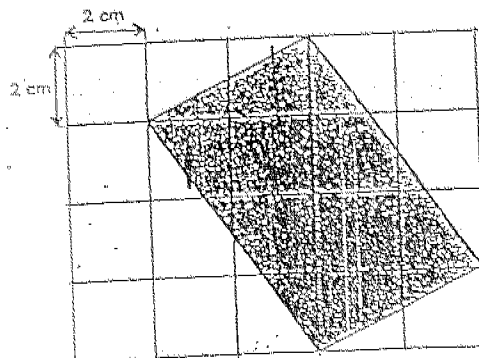
(1) 0.063
(2) 0.63
(3) 63
(4) 630

9. The table shows the parking rates at a car park.

Parking Rates	
First hour	$ 2.00
Every additional half an hour or part thereof	$ 1.20

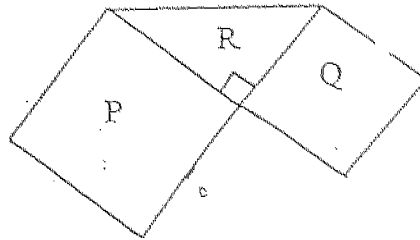Mr Li's car is parked from 10.00 a.m. to 2.20 p.m.
How much does he have to pay ?

(1) $ 6.20
(2) $ 9.20
(3) $ 10.00
(4) $ 10.40

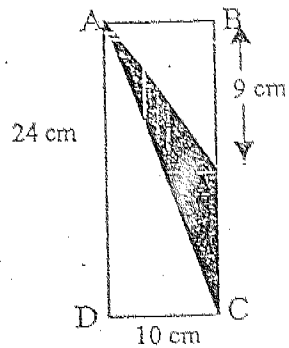10. The grid below is made up of squares of side 2 cm . Find the shaded area.

(1) 8 cm^2
(2) 16 cm^2
(3) 24 cm^2
(4) 32 cm^2

3

11. In the figure below, P and Q are squares and R is a right-angled triangle. The areas of P and Q are 64 cm^2 and 36 cm^2 respectively. What is the area of R ?

(1) 24 cm^2
(2) 28 cm^2
(3) 48 cm^2
(4) 72 cm^2

12.

ABCD is a rectangle. The area of the shaded triangle is

(1) 45 cm^2
(2) 75 cm^2
(3) 120 cm^2
(4) 150 cm^2

13. How many of the following shapes can tessellate ?

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

4

14. When a container is $\frac{1}{4}$ filled with water it weighs 2.5 kg. When it is completely filled with water, it weighs 3.7 kg. What is the weight of the empty container?

(1) 1.3 kg
(2) 1.6 kg
(3) 2.1 kg
(4) 2.2 kg

15. Simplify $9e + 2 - 3e + 4e - 1$

(1) 10e - 1
(2) 10e + 1
(3) 6e - 1
(4) 6e + 1

Name: _____

Class: Primary 6 _____

Booklet B
Section B (20 marks)

Each question from 16 to 35 carries 1 mark.
Write your answers in the spaces provided.
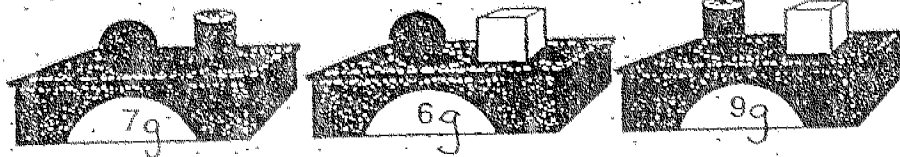
16. What fraction of 2 hours is 40 seconds?

17. A file and a notebook cost \$6.20. The cost of the notebook was thrice the cost of the file. Find the cost of the file.

$_____

18. How many $\frac{1}{5}$'s are there in $5\frac{4}{5}$?

6

19. Janet has a total of 40 blue and yellow beads. The number of blue beads is $\frac{3}{5}$ the number of yellow beads. How many blue beads does she have?

20. Kathy has $\frac{3}{4}$ as much money as Lina. The ratio of Lina's money to Kathy's money can be expressed as 24 : _____.
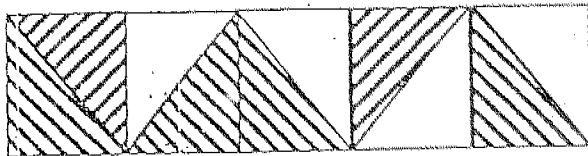
21. What is the weight of one ⚫ ?

_____ g

22. Mrs Lim gave away 30% of her New Year cookies to her sister and 60% of the remainder to her neighbour. What percentage of the cookies had she left?

_____ %

23. What percentage of the figure is not shaded ?

_____ %

24. A school organized an excursion for 500 pupils. If each bus could only carry 44 pupils, how many buses would be needed ?

25. The ratio of 2 m to 25 cm is _____ .
(Express your answer in the simplest form.)

26. Continue the number pattern.

1, 2, 3, 5, 8, 13, 21, 34, [?]
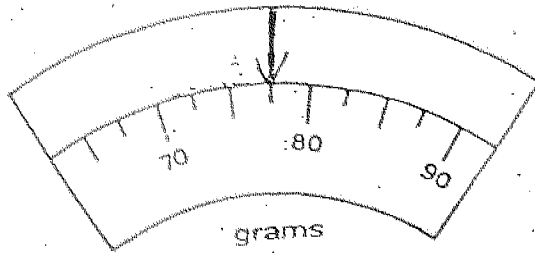
27. The population of a town is 764 913.
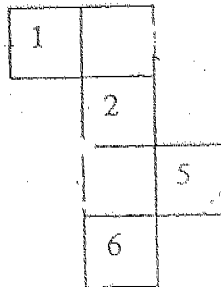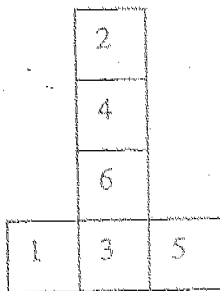Express this number to the nearest thousand.

8

28. The figure shows part of a weighing scale.
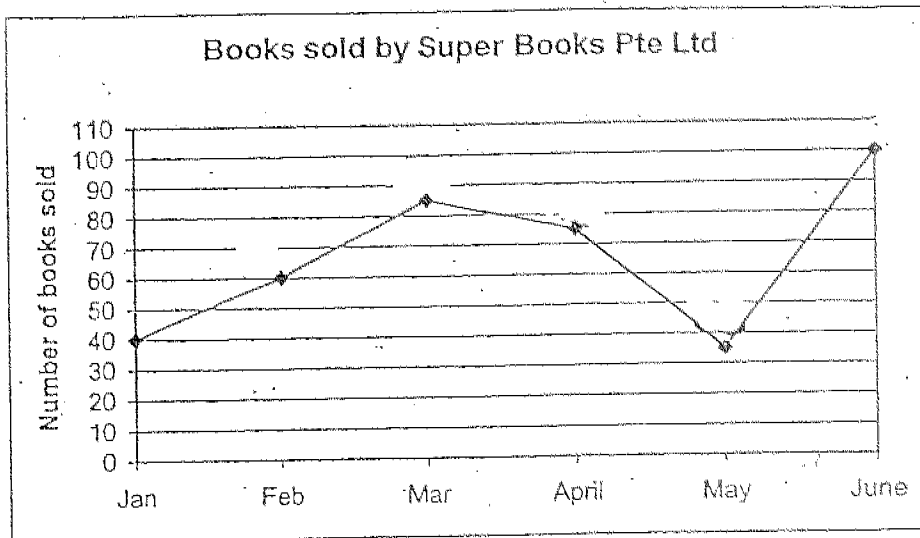What is the reading indicated by the arrow ?

_____ g

29. A movie started at 11.10 p.m. and ended at 1.35 a.m. How long was the movie in hours and minutes ?

_____ h _____ min

30. The following diagrams show the nets of a dice. Fill in the missing faces of the net formed by the same dice.

The graph below shows the number of books sold by Super Books Pte Ltd from January to June. Use the graph to answer Q31 to Q33.

Books sold by Super Books Pte Ltd

31. How many more books were sold in June than in May?

_____

32. Find the average number of books sold in March and April.

_____

33. How many percent more books were sold in February than in January?

_____%

34. Judy weighs y kg more than Mariam. If their total weight is 53kg, how much does Mariam weigh?

_____ kg

35. There are 720 books in a library. $\frac{1}{2}$ of them are English books, $\frac{1}{3}$ of them are Malay books and the rest are Chinese books. How many Chinese books are there?

_____

10

Name: _____ _____ (   )

Class: Primary 6 _____

<u>Section C (55 marks)</u>
For questions 36 to 50, show your working clearly in the space below each question and write your answer in the spaces provided.
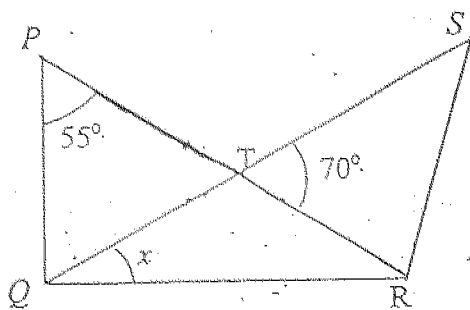The number of marks available is shown in brackets [ ] at the end of each question or part-question.

_____

36.   In a basket, there are apples, oranges and pears. The ratio of apples to oranges is $1 : 3$ and the ratio of apples to pears is $2 : 9$. Express the number of pears as a fraction of the total number of fruits in the basket.

Answer : _____ [2m]

37.   In the figure, QT = TR, $\angle$ QPT = 55° and $\angle$ STR = 70°.
      Find $\angle$x.

Answer : _____ [2m]

38. David has thrice as many marbles as Thomas. Altogether, they have $4m$ marbles. How many marbles does David have?

Answer :_____ [2m]

39. The average of 2 numbers is 8. If one number is $5t + 8$, find the other number if $t = \dfrac{3}{20}$.

Answer :_____ [3m]

40. There is a block of 100 flats. Ah Huat, a painter, paints one flat each month from January to November. The flats are painted in the same order and Ah Huat takes a holiday every December. If my flat is painted in May 2004, which month and year will it be painted next ?

Answer :_____ [3m]

41. In a primary school of 1960 students, $\frac{1}{4}$ of the boys and $\frac{1}{5}$ of the girls make up 400 children. How many girls are there ?
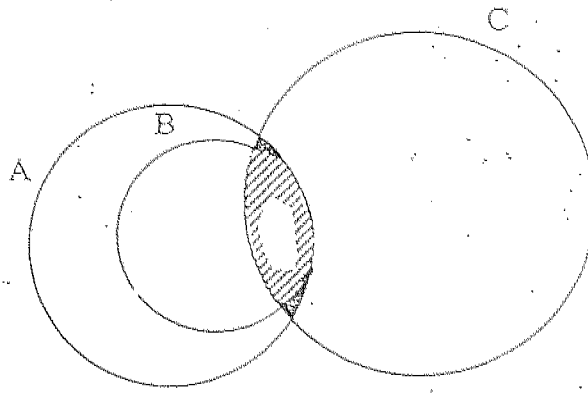
Answer : _____ [4m]

42. Mr Tan spent $\frac{5}{8}$ of his salary. He gave $\frac{2}{3}$ of the remainder to his wife and his two children in the ratio 9 : 5 : 1 and saved the rest. If he saved $360,

(a) How much was his salary?
(b) What fraction of his salary did he give to his wife?

Answer : (a) _____ [1m]

(b) _____ [3m]

43. The figure below is made up of 3 circles A, B and C. The ratio of Circle A to Circle B to Circle C is 3 : 1 : 4. The shaded part is $\frac{2}{5}$ of Circle B. What fraction of the whole figure is not shaded ?

Answer : _____ [4m]

44. In a school dance troupe, 42% of them were male. When 14 male members left the troupe, the number of male members left was 112. If 40 more female pupils joined the troupe, how many members were there after that?
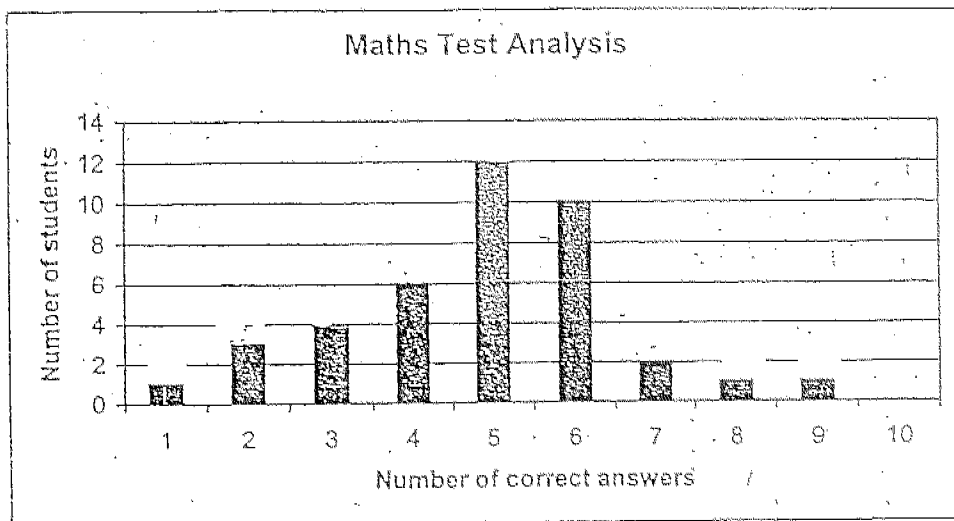
Answer : _____ [4m]

45. The ratio of 10-cent to 20-cent to 50-cent coins in a box is 1 : 3 : 5. If the total amount of money in the box is $ 48 , how many coins are there altogether ?

Answer : _____ [4m]

46. A Mathematics test was given to a class of 40 pupils. The Maths tests analysis was shown in the graph below.

Maths Test Analysis

(a) To pass the Maths test, a pupil must obtain at least 5 correct answers. What percentage of the total number of pupils failed the test?

(b) If the teacher wants 80% of the pupils to pass the test, what should be the least number of correct answers that the pupils must get in order to pass?

Answer : (a) _____ [2m]

(b) _____ [2m]

16

47. A delivery company charges $8 for parcels delivered on time and $6 for parcels delivered late. In December the company collected $6080. For every 20 parcels delivered, 4 were delivered late.

(a) What was the total number of parcels delivered on time?
(b) How much less money did the company collect in December because of parcels delivered late?

Answer : (a) _____ _____ [3m]

(b) _____ [2m]

48. Jonah had 60% more money than Andy. Henry had half of what Jonah had. When Jonah gave $810 to Andy, both of them will have the same amount of money.

(a) How much did Andy have at first?

(b) If Henry gave 25% of his money to charity, how much money had he left?
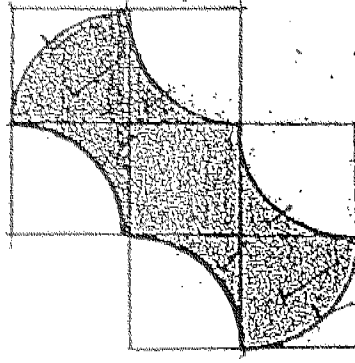
Answer : (a) _____ [3m]

(b) . _____ [2m]

49. In the figure below, each quadrant has a radius of 7 cm.
    (a) Find the perimeter of the shaded part.
    (b) Find the area of the shaded part.

    (Take π to be $\dfrac{22}{7}$)

Answer : (a)_____ [1m]

(b)_____ [4m]

50. Alice and Danny cycled from Town X to Town Y at 12 km/h and 10 km/h respectively. Alice left Town X at 9.00 a.m. and arrived at Town Y at 9.30 a.m. When Alice arrived at Town Y, Danny was 1.5 km away from Town Y.

(a) What is the distance between the 2 towns?
(b) What time did Danny leave Town X?

Answer : (a) _____ [1m]

(b) _____ [4m]

~ End of Paper ~
♠ Please check your work carefully ♠

SA1

1) 2

2) 3

3) 2

4) 2

5) 1

6) 3

7) 4

8) 1

9) 4

10) 4

11) 1

12) 2

13) 4

14) 3

15) 2

16) 1/180

17) 1.55

18) 29

19) 15 blue beads

20) 18

21) 2

22) 28

23) 40

24) 12 buses

25) 8.1

26) 55

27) 765000

28) 77.5

29) 2 h 25 min

30) $\frac{3}{4}$

31) 65 more

32) 80 books

33) 50

34) $\frac{53-y}{2}$

35) 120 Chineses books

36) 9/17

37) 35°

38) 3 m marbles

39) 7.25

40) June 2013

41) 1800 girls

42) a) $ 2880

   b) 3/20

43) 31/33

44) 326 members

45) 135 coins

46) a) 35%

   b) 4

47) a) 640 parcels

   b) 320

48) a) $ 2700

   b) $ 1620

49) a) 66 cm

   b) 168 cm^2

50) a) 6 km

   b) 9.27 a.m.