



SA2

# AI TONG SCHOOL

2004

SEMESTRAL ASSESSMENT 2

PRIMARY 5

MATHEMATICS

DURATION : 2 hour 15 minutes

DATE: 28 OCT 2004

## INSTRUCTIONS

**Do not open the booklet until you are told to do so.**



5. 4 girls shared  $\frac{5}{6}$  of a cake equally. What fraction of the cake did each girl get?

(1)  $\frac{5}{12}$

(2)  $\frac{5}{18}$

(3)  $\frac{5}{24}$

(4)  $\frac{5}{36}$

6. Which number when divided by 8 gives a quotient of 75 and a remainder of 2?

(1) 150

(2) 158

(3) 600

(4) 602

7. James has 768 marbles. Peter has 5 times as many marbles as James and Minah has 395 more than James. How many more marbles does Peter have than Minah?

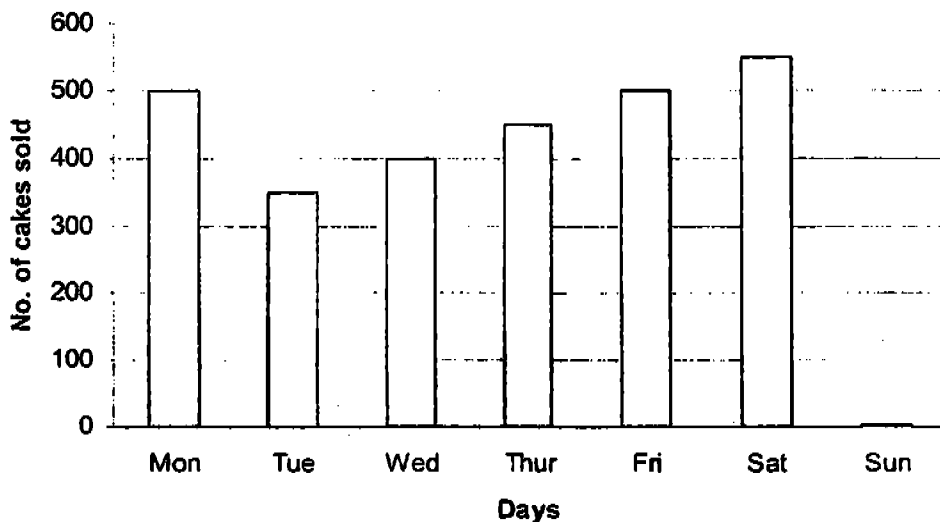
(1) 2677

(2) 3072

(3) 3445

(4) 3840

8. The graph below shows the number of cakes sold in one week. What was the average number of cakes sold for the whole week? (Round off your answer to the nearest 1 decimal place)



(1) 392.8

(2) 392.9

(3) 458.3

(4) 458.4

9.  $5\frac{3}{4} + 3\frac{5}{6} + \square = 10\frac{2}{3}$

The missing number in the box is \_\_\_\_\_.

(1)  $1\frac{1}{12}$

(2)  $8\frac{3}{4}$

(3)  $10\frac{7}{12}$

(4)  $20\frac{1}{4}$

10. The number of Malay, Chinese and English books in a reading room is in the ratio 15 : 3 : 2. The number of Malay books is 810. Find the total number of Chinese and English books.

(1) 54

(2) 108

(3) 162

(4) 270

11. Mrs Tan bought 6.12 kg of meat. She used 2.87 kg to make satay and 1 kg 5g to make pie. How many kilograms of meat had she left?

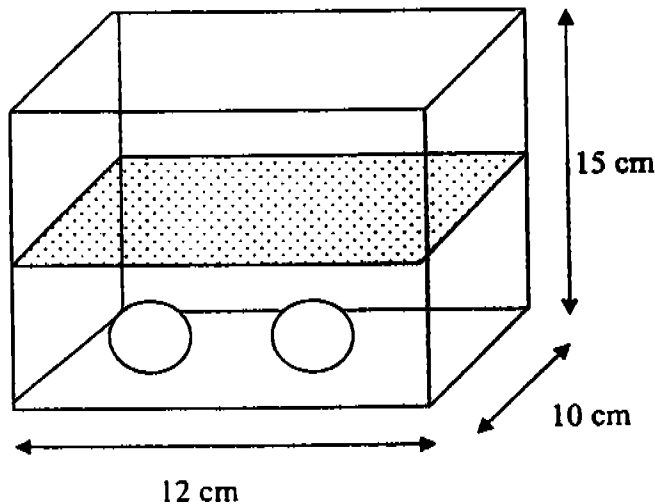
(1) 1.750 kg

(2) 2.200 kg

(3) 2.245 kg

(4) 7.985 kg

12. A rectangular box, with a base of 12 cm by 10 cm, contains some water. 2 balls of equal size are dropped into the box. The water level rises by 5 cm. Find the volume of each ball.



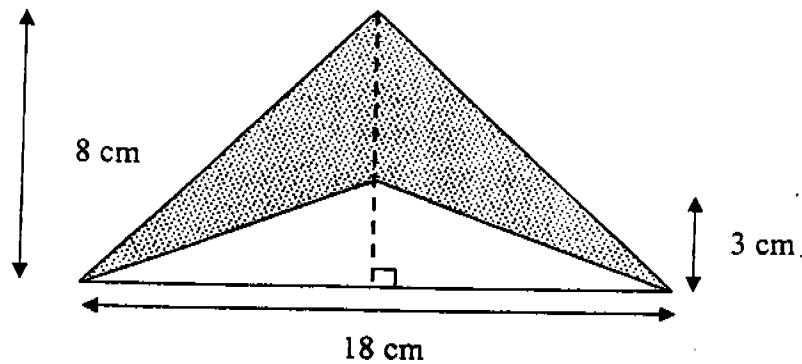
(1)  $300\text{ cm}^3$   
(3)  $900\text{ cm}^3$

(2)  $600\text{ cm}^3$   
(4)  $1800\text{ cm}^3$

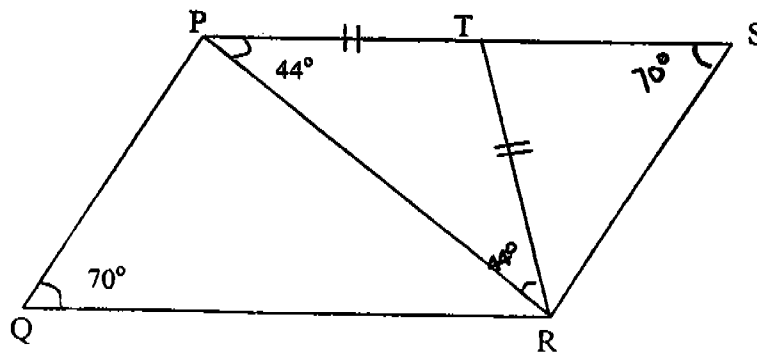
13. Miss Pang's car was parked in a car park from 3.30pm to 4.45pm. The parking rates are shown in the table below. How much must she pay?

Parking Rates	
First hour	\$1.00
Every additional $\frac{1}{2}$ hour or part thereof	\$0.60

- (1) \$1.30  
 (2) \$1.50  
 (3) \$1.60  
 (4) \$2.20
14. Find the shaded area of the triangle.



- (1)  $27 \text{ cm}^2$   
 (2)  $45 \text{ cm}^2$   
 (3)  $72 \text{ cm}^2$   
 (4)  $99 \text{ cm}^2$
15. PQRS is a parallelogram and PTR is an isosceles triangle. Find  $\angle \text{TRS}$ .



- (1)  $22^\circ$   
 (2)  $44^\circ$   
 (3)  $70^\circ$   
 (4)  $88^\circ$

**Booklet B**

**Section B (20 Marks)**

Each question from 16 to 35 carries 1 mark. The figures are not drawn to scale. Write your answer in the space provided.

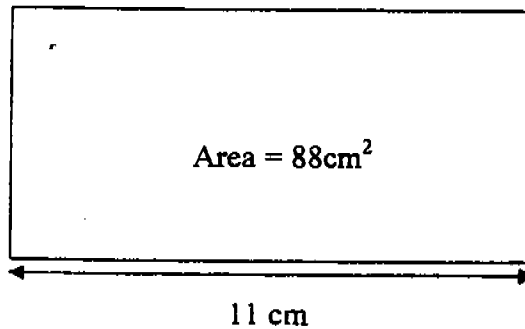
16. The sum of 8096, 6988 and 12873 when rounded off to the nearest hundred is \_\_\_\_\_

Answer: \_\_\_\_\_

17. What is the place value of the digit 5 in the numeral 8 459 349?

Answer: \_\_\_\_\_

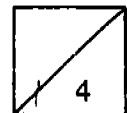
18. Find the perimeter of the following rectangle.



Answer: \_\_\_\_\_ cm

19. What fraction of \$4 is 48¢?

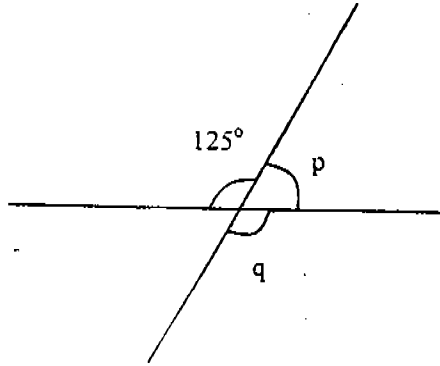
Answer: \_\_\_\_\_



20. Denny had \$35. He gave  $\frac{3}{5}$  of her money to his sister. How much money does he have now?

Answer: \$ \_\_\_\_\_

21. In the figure below, find the difference between  $\angle p$  and  $\angle q$ .



Answer: \_\_\_\_\_°

22. If  $3 : 7 = 9 : \square$ , the missing number in the box is \_\_\_\_\_.

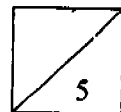
Answer: \_\_\_\_\_.

23. In a class, there are 20 girls and 18 boys. What is the ratio of the number of boys to the total number of pupils in the class?

Answer: \_\_\_\_\_

24. Pete, Kerry and Victor share \$1500 in the ratio 4 : 5 : 6. How much money does Victor receive?

Answer: \$ \_\_\_\_\_



25.  $2\frac{3}{8}$  expressed as a decimal is \_\_\_\_\_.

Answer: \_\_\_\_\_

26.  $\frac{7}{12}$  h = \_\_\_\_\_ min

Answer: \_\_\_\_\_ min

27. 6.05 expressed as a mixed number in its lowest term is \_\_\_\_\_.

Answer: \_\_\_\_\_

28. What is the sum of 8.6 m and 12m 4cm?

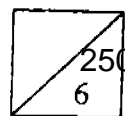
Answer: \_\_\_\_\_ m

29. What is the average of 7, 0, 3 and 2?

Answer: \_\_\_\_\_

30. The average length of two pieces of wire is 102 cm. One piece is 24 cm longer than the other. Find the length of the shorter piece of wire.

Answer: \_\_\_\_\_ cm





31. A factory can produce 216 toys in 3 hours. How many toys can the factory produce in 4 hours at this rate?

Answer: \_\_\_\_\_ toys

32. The table shows the charges for water consumption. How much must you pay for using 65 units of water?

Water Consumption Rates	
First 25 units	55 cents per unit
Over 25 units	75 cents per unit

Answer: \$ \_\_\_\_\_

33. What is 14.5% of \$200?

Answer: \$ \_\_\_\_\_

34. Express  $45\frac{1}{2}\%$  as decimal.

Answer: \_\_\_\_\_

35. John saves 45% of his salary every month. If he saves \$135, what is his monthly salary?

Answer: \$ \_\_\_\_\_

**SECTION C: (55 marks)**

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

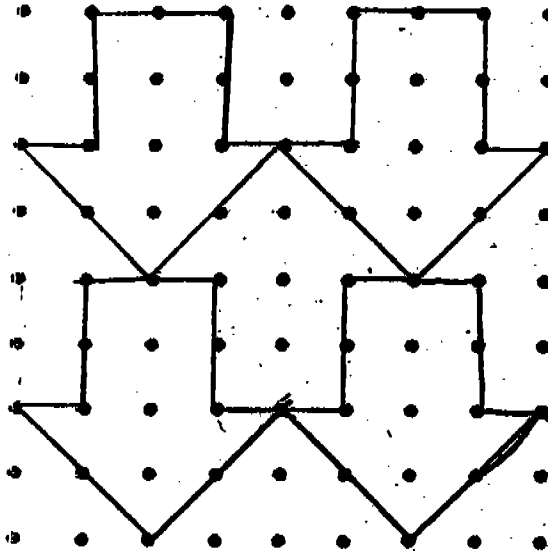
The number of marks available is shown in brackets [ ] at the end of each question or part-question.

36. Mr and Mrs Song have 3 sons and 2 daughters. From the information given in the table below, find the age of Mr Song.

Average age of the males in the family	27 yrs
Average age of the females in the family	26 yrs
Average age of the sons in the family	19 yrs
Average age of the daughters in the family	16 yrs

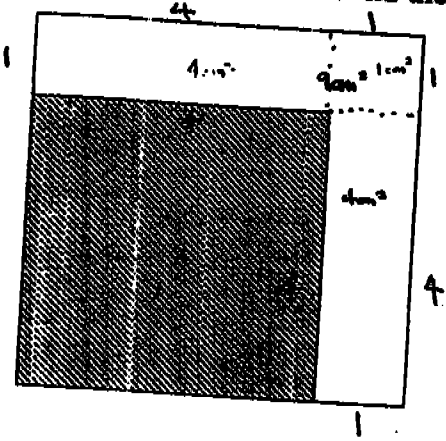
Answer: \_\_\_\_\_ [ 2 ]

37. Draw 4 more of the unit shape and extend the tessellation in the given space.



Answer: \_\_\_\_\_ [ 2 ]

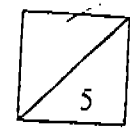
38. The following figure is made up of 2 squares of certain dimensions. The area of the unshaded part is  $9 \text{ cm}^2$ . Find the perimeter of the unshaded part.



Answer: \_\_\_\_\_ [ 2 ]

39. The price of a computer was \$2995. Miss Lee, however, decided to purchase it under a hire purchase agreement. She made a down payment of \$500 and paid the remaining amount in 18 equal monthly instalments of \$200. How much more did she pay under the hire purchase agreement?

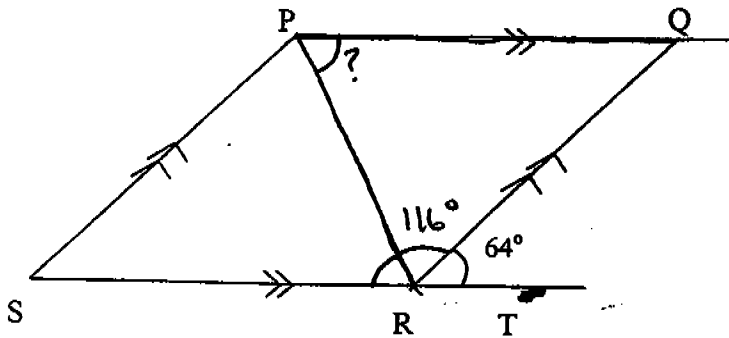
Answer: \_\_\_\_\_ [ 3 ]



40. Su Ling collected some stickers. She gave  $\frac{1}{3}$  of them to her friend and  $\frac{1}{4}$  of the remainder to her brother. What fraction of her stickers had she left?

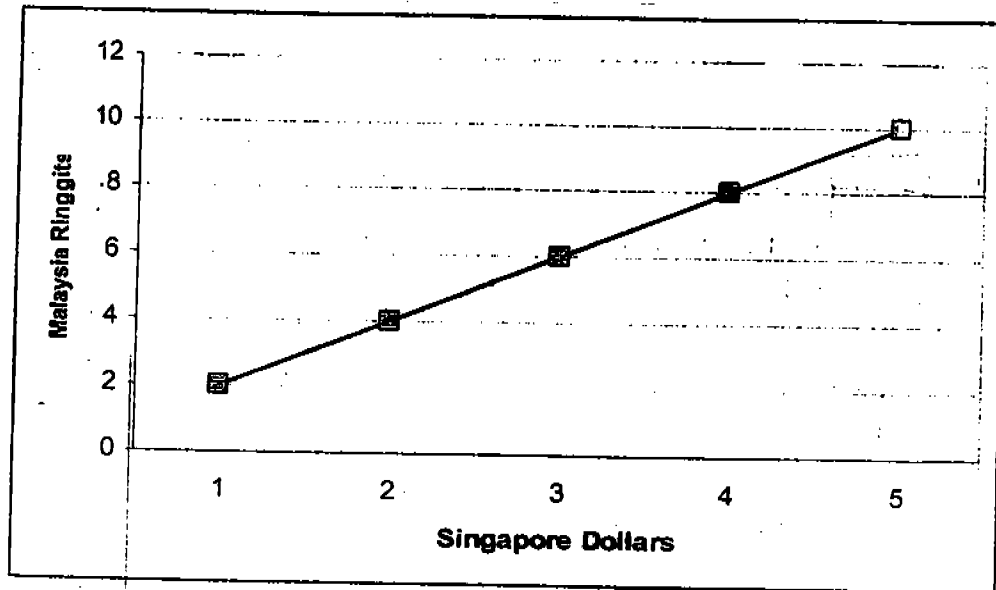
Answer: \_\_\_\_\_ [ 3 ]

41. PQRS is a rhombus. Find  $\angle RPQ$ .



Answer: \_\_\_\_\_ [ 3 ]

42. The following graph shows the exchange rate between Singapore dollars (S\$) and Malaysian ringgits (RM) on a particular day. Study the graph and answer the following questions.



- (a) How many Malaysian Ringgit can I exchanged for S\$25?  
 (b) How many S\$ can I exchange for RM40?  
 (c) Peng Siong went to Malaysia and bought a shirt for RM70, a pen for RM15 and a belt for RM35. How much did he spend altogether in Singapore dollars?

Answer: a) \_\_\_\_\_ [ 1 ]

b) \_\_\_\_\_ [ 1 ]

c) \_\_\_\_\_ [ 2 ]

43. The table below shows the bulk purchase prices and the number of cards per packet of two types of Christmas cards X and Y.

Type	Price	Number of cards per packet
X	\$88 for 5 packets	20
Y	\$96 for 4 packets	30

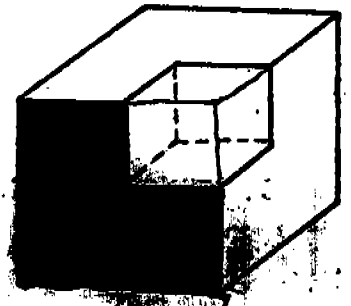
Sunrise Company wants to buy 900 cards for its customers. It can only purchase in bulk.

- a) Which type of cards should the company buy if it prefers the cheaper type?  
 b) How much will it save if it buys the cheaper type?

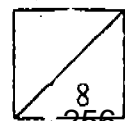
Answer: a) \_\_\_\_\_ [ 3 ]

b) \_\_\_\_\_ [ 1 ]

44. The volume of a cube is  $343\text{cm}^3$ . If a smaller cube is cut off from it as shown in the figure below, the remaining volume is  $279\text{cm}^3$ . Find the area of the shaded side.



Answer: \_\_\_\_\_ [ 4 ]



45. The parking charges at car park Q is shown in the table below.

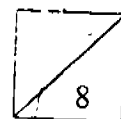
First hour or part thereof	\$2.50
For every additional half an hour or part thereof	\$1.50

Mr Tang pays \$9 less for parking his car at car park P than car park Q from 8.00 am to 4.45 pm. If the rate for the first hour at car park P is \$1.50, how much does it charge for every additional half an hour or part thereof.

Answer: \_\_\_\_\_ [ 4 ]

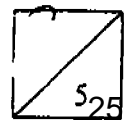
46. 60% of Mr Seow's books are Chinese storybooks and the rest are English storybooks. If he buys another 48 Chinese storybooks, his collection of Chinese storybooks will be increased by 10%. How many English books does Mr Seow have?

Answer: \_\_\_\_\_ [ 4 ]



47. The cost of a television set is 80% more than the cost of a washing machine. The cost of a projector is 140% of the television set. The total cost of the three items is \$4256. Find the total cost of the television and the projector.

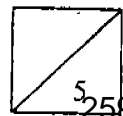
Answer: \_\_\_\_\_ [ 5 ]





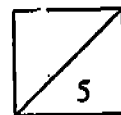
48. Three containers A, B and C had 900 ml, 1200 ml and 700 ml of orange juice respectively.  $\frac{1}{3}$  of the orange juice from container A was poured into container B. After that,  $\frac{1}{5}$  of the orange juice from container B was poured into container C. Finally,  $\frac{1}{10}$  of the orange juice from container C was poured back into container A. What fraction of the total amount of orange juice is there in container A in the end.

Answer: \_\_\_\_\_ [ 5 ]

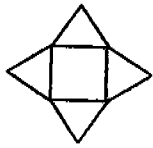


49. The ratio of Albert's stamps to Beng Huat's stamps was 3 : 8 at first. When Beng Huat gave 270 stamps to Albert, he still had twice as much as Chan Ling. How many stamps did Chan Ling have if Albert had 1080 stamps after receiving the stamps from Beng Huat?

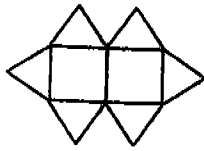
Answer: \_\_\_\_\_ [5]



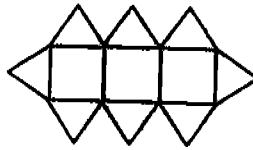
50. The figures below are formed from squares and triangles.



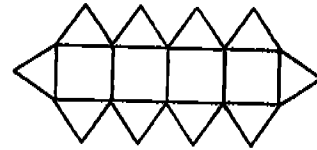
Pattern 1



Pattern 2



Pattern 3



Pattern 4

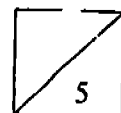
- How many small triangles are there in Pattern 7?
- How many small triangles are there in Pattern 49?
- If there are 2484 triangles in a particular pattern, how many squares does it have?

Answer: a) \_\_\_\_\_ [ 1 ]

b) \_\_\_\_\_ [ 2 ]

c) \_\_\_\_\_ [ 2 ]

--- CHECK YOUR WORK CAREFULLY ---



AI TONG SCHOOL  
2004 SEMESTRAL ASSESSMENT 2  
PRIMARY 5 MATHEMATICS

SAR

- |                      |                           |
|----------------------|---------------------------|
| 1) 3                 | 28) 20.64                 |
| 2) 1                 | 29) 3                     |
| 3) 2                 | 30) 90                    |
| 4) 1                 | 31) 288                   |
| 5) 3                 | 32) 43.75                 |
| 6) 4                 | 33) 29                    |
| 7) 1                 | 34) 0.455                 |
| 8) 2                 | 35) 300                   |
| 9) 1                 | 36) 51 years old          |
| 10) 4                | 37)                       |
| 11) 3                | 38) 20 cm                 |
| 12) 1                | 39) \$ 1105               |
| 13) 3                | 40) $\frac{1}{2}$         |
| 14) 2                | 41) $58^{\circ}$          |
| 15) 1                | 42) a) RM 50              |
| 16) 28000            | b) \$ 20                  |
| 17) ten thousands    | c) \$ 60                  |
| 18) 38               | 43) a) Type Y             |
| 19) $\frac{3}{25}$   | b) \$ 24                  |
| 20) 14               | 44) $33 \text{ cm}^2$     |
| 21) 70               | 45) \$ 1                  |
| 22) 21               | 46) 320 books             |
| 23) 9 : 19           | 47) \$ 3456               |
| 24) 600              | 48) $\frac{1}{4}$         |
| 25) 2.375            | 49) 945 stamps            |
| 26) 35               | 50) a) 16 small triangles |
| 27) $6 \frac{1}{20}$ | b) 100 small triangles    |
|                      | c) 1241 squares           |