

Anglo-Chinese School (Junior)
Semestral Assessment 1- 2005
Mathematics
Primary 6

SAT

BOOKLET A

Name : _____ ()
Class : Primary 6. ()
Date : 10 May 2005

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

INSTRUCTIONS TO CANDIDATES

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO
DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.
ANSWER ALL QUESTIONS.

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. Choose the correct option and shade the correct oval in the Optical Answer Sheet provided.

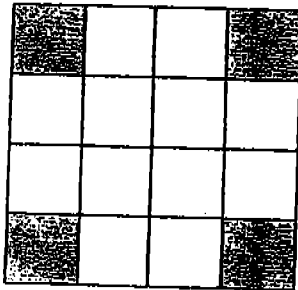
1 The value of $27 + 9 \div 3 \times 4$ is _____

- (1) 3
- (2) 39
- (3) 48
- (4) 120

2 Samy was facing south-east. He turned 180° . What direction is he facing now?

- (1) south - east
- (2) south - west
- (3) north - east
- (4) north - west

3 How many line(s) of symmetry does this figure have?



- (1) 1
- (2) 2
- (3) 4
- (4) 6

4 The length of string A is $3\frac{1}{2}$ cm and the length of string B is 2 cm.
The ratio of A's length to B's length is _____

- (1) 2 : 1
- (2) 3 : 2
- (3) 2 : 7
- (4) 7 : 4

EC & RT

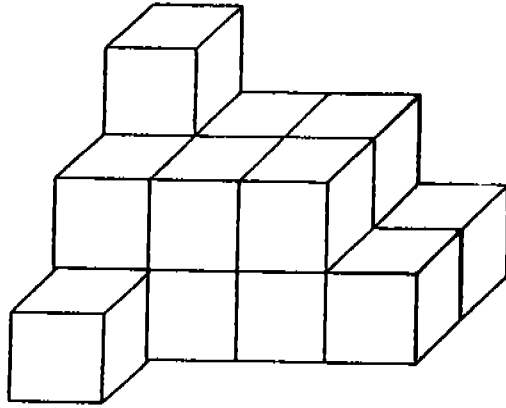
A1

Sub total

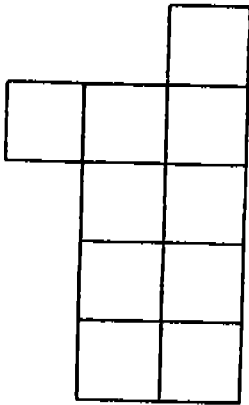
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122

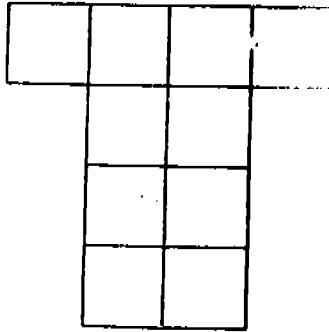
5 Rhamli stacked 16 cubes.



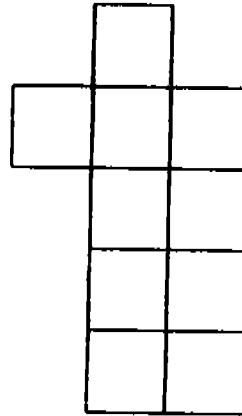
What did the stack look like when he viewed it from above?



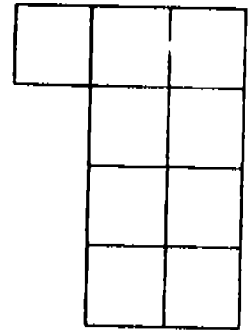
(1)



(2)



(3)



(4)

6 In a school, 40 % of the pupils in the band are boys. If there are 32 more girls than boys, how many pupils are there in the band?

- (1) 60
- (2) 70
- (3) 112
- (4) 160

7 A rectangle has a perimeter of 60 cm. If the area of the rectangle is 200 cm^2 , what is the length ?

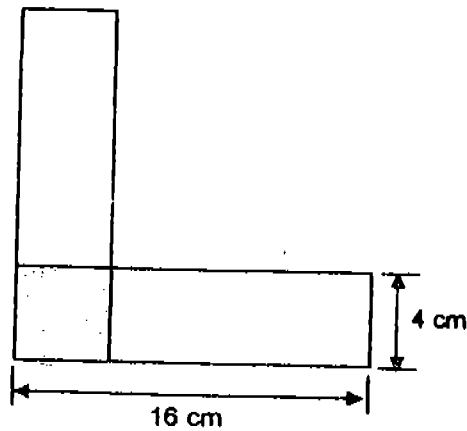
- (1) 10 cm
- (2) 20 cm
- (3) 25 cm
- (4) 30 cm

EC & RT

A2

Sub-total :

- 8 Two similar rectangles overlap to form a square as shown in the figure below. What is the total area of the unshaded parts?



- (1) 48 cm²
(2) 64 cm²
(3) 96 cm²
(4) 112 cm²
- 9 A class of pupils and two teachers went to a football match. Each adult ticket cost \$10. Children were admitted at half the adult price. The total cost of the tickets was \$170. How many children attended the match?
- (1) 20
(2) 25
(3) 30
(4) 35
- 10 42 identical books are placed one on top of the other. If each book is $\frac{3}{4}$ cm thick, what is the height of the stack of books?
- (1) 21.0 cm
(2) 31.5 cm
(3) 56.0 cm
(4) 75.5 cm
- 11 Mrs Ting had 15 kg of sugar. After making 10 cakes, she had 10 kg of sugar left. What was the average amount of sugar needed for a cake?
- (1) 50 g
(2) 100 g
(3) 500 g
(4) 1500 g

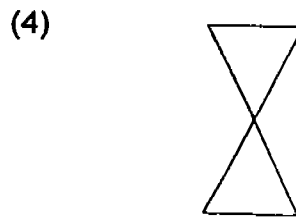
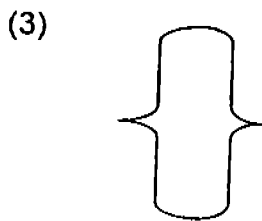
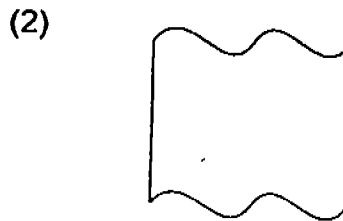
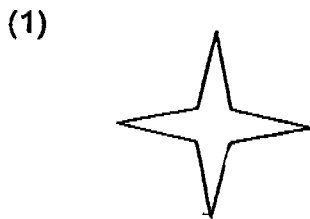
12 Ming and Sue drove from Town A to Town B at 60 km/h and 80 km/h respectively. If they started off at the same time, how far apart were they after 15 minutes?

- (1) 5 km
- (2) 10 km
- (3) 15 km
- (4) 20 km

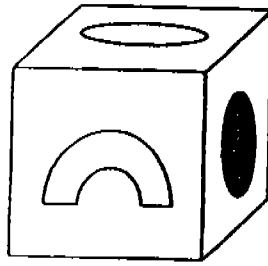
13 Jasmine is x years younger than Ivan. If Ivan is y years old, what is their average age?

- (1) $\frac{(x+y)}{2}$ years old
- (2) $\frac{(y-x)}{2}$ years old
- (3) $\frac{(2y-x)}{2}$ years old
- (4) $\frac{(2x-y)}{2}$ years old

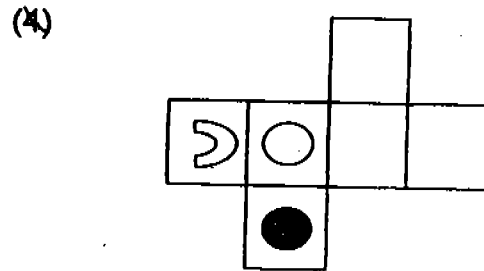
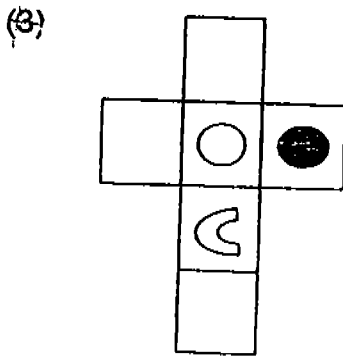
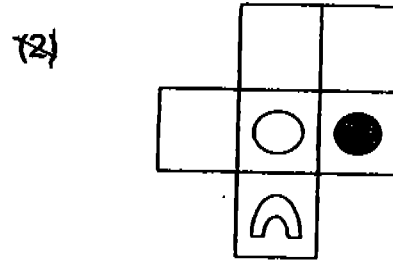
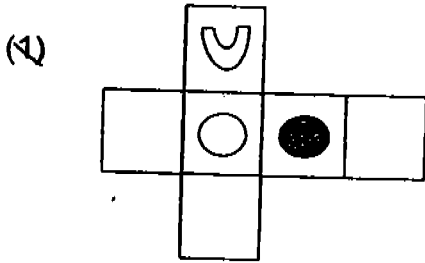
14. Which of the following shapes cannot be tessellated?



15 The figure below shows a solid.



Which one of the following can be a net of the solid?



Anglo-Chinese School (Junior)
Semestral Assessment 1- 2005

Mathematics
Primary 6

BOOKLET B

Name : _____ ()

Class : Primary 6. ()

Date : 10 May 2005

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

INSTRUCTIONS TO CANDIDATES

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

Booklet A	25
Booklet B	75
Total	100

Parent's Signature : _____

Booklet B1 (20 marks)

Each question from 16 to 35 carries 1 mark each. Write the answers in the spaces provided. Give the answers in the units stated.

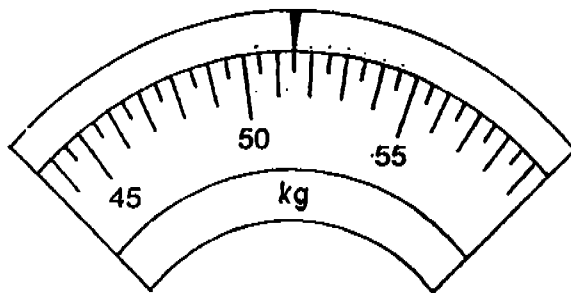
16 Bhavani's age is 11 years 9 months. What will her age be in 11 months time?

Ans: _____ years _____ months

17 Osman took 1 hour 40 minutes to drive from his house in Singapore to Johor Bahru. He reached Johor Bahru at 1.30 p.m. What time did he leave his house?

Ans: _____ a.m.

18 What is the reading indicated on the weighing scale below?

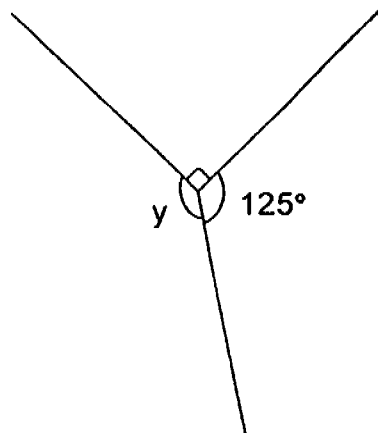


Ans : _____ kg

19 How many 5-cent coins will be needed to make \$7.50?

Ans : _____

20 Find $\angle y$ in the figure shown.



Ans: _____ $^\circ$

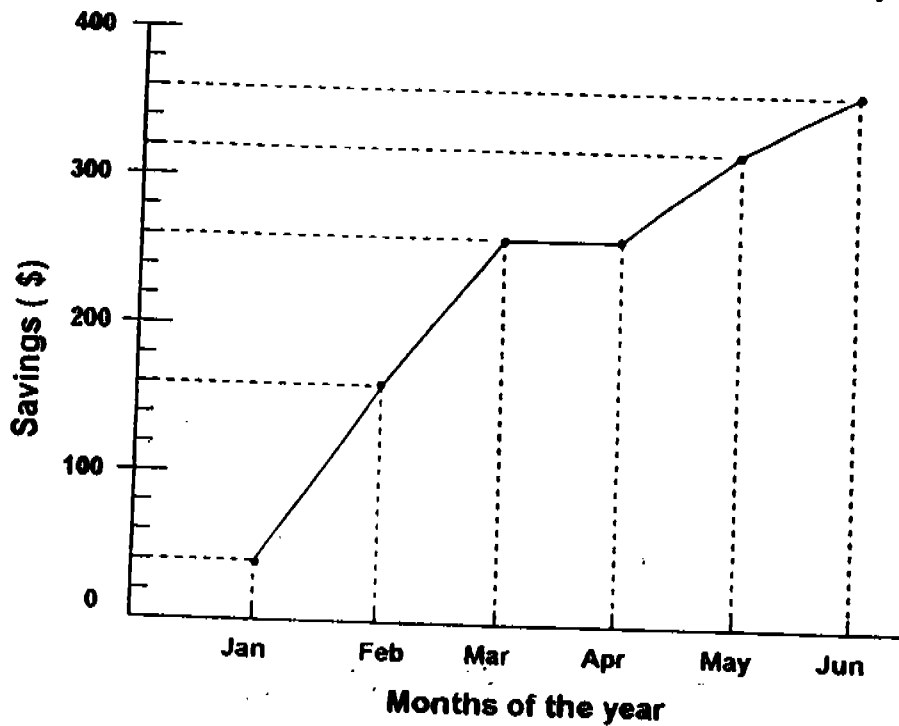
EC & RT

B1

Sub-total:

Use the information below to answer questions 21 and 22.

The line graph shows the amount of money in Lee Keng's savings account each month. He did not withdraw any money from his account from January to June.



21 Between which one-month period did he save the most money?

Ans: Between the months of _____ and _____

22 From May to June, what was the percentage increase in Lee Keng's savings?

Ans: _____ %

23 In a school of 900 pupils, 270 pupils are girls. What percentage of the pupils are boys?

Ans: _____ %

24 Express 26 cm as a ratio of 0.65 m in the simplest form.

Ans: _____

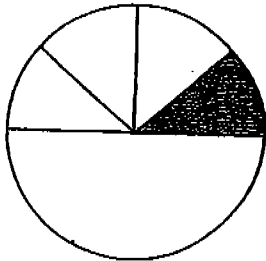
25 At a supermarket, 6 mangoes cost \$4.20. Find the cost of 5 mangoes.

Ans: \$ _____

26 Lucy bought some cushions. $\frac{1}{4}$ of them were pink. The remaining 36 were blue. How many cushions did she buy?

Ans: _____

27 In the figure below, half of the circle is divided into 4 equal parts. What fraction of the circle is shaded?



Ans: _____

28 A packet of rice weighs 6 kg. Jack used $2\frac{1}{2}$ kg of it on Saturday and $\frac{2}{5}$ of the remainder on Sunday. How much rice was left?

Ans: _____ kg

29 A motorist used $4\frac{1}{2}$ litres of petrol for every 60 km travelled. What was the amount of petrol used if he travelled 150 km?

Ans: _____ litres

30 The table below gives only some information about the boys and girls in a class who wear spectacles and those who do not. How many children were there in the class?

	Number of boys	Number of girls	Number of children
Wear spectacles	10		22
Do not wear spectacles		8	
Number of children	22		

Ans: _____ children

EC & RT

B3

Sub-total:

31 The number of tickets sold at a stadium for 5 football matches was 270 938. Round off this number to the nearest thousand.

Ans: _____

32 Bob spent $\frac{2}{5}$ of his allowance on food and some of it on transport. If the amount he spent on transport is equal to $\frac{1}{3}$ of the amount he spent on food, what fraction of money had he left?

Ans: _____

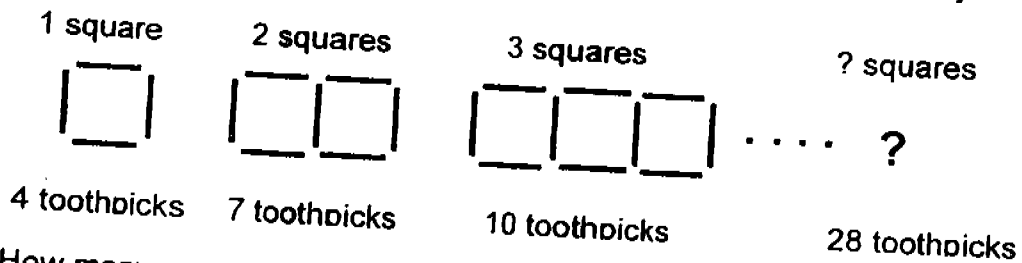
33 The distance between Town A and Town B is 450 km. If a motorist drove from Town A at an average speed of 75 km/h, how long did he take to reach Town B?

Ans: _____ h

34 A book costs \$8 less than a bag. The price of 3 books is equal to the price of 2 bags. What is the price of a book?

Ans: \$ _____

35 The following figures are formed using identical toothpicks and they follow a pattern.



How many squares can be made in a row with 28 toothpicks?

Ans: _____

Booklet B2 (55 marks)

Write the answers to questions 36 to 50 in the spaces provided. For each question, the working and statements must be clearly shown in the space below it. The number of marks available is shown in the brackets [] at the end of each question or part-question.

- 36 Annemarie had \$z. She bought 15 erasers and 12 pens. If each pen cost \$w and 5 erasers cost as much as a pen, how much did Annemarie have left?
(Give your answer in the simplest form)

Ans: _____ [2]

- 37 Town X is 120 km away from Town Y. One morning, a bus which usually travels at 60 km/h started $\frac{1}{2}$ h late from Town X. At what speed must it travel in order to reach Town Y on time?

Ans: _____ [2]

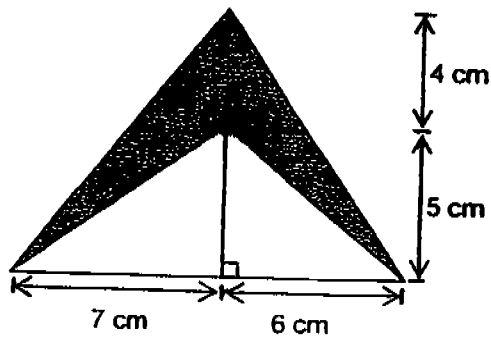
EC & RT

B5

Sub-total:

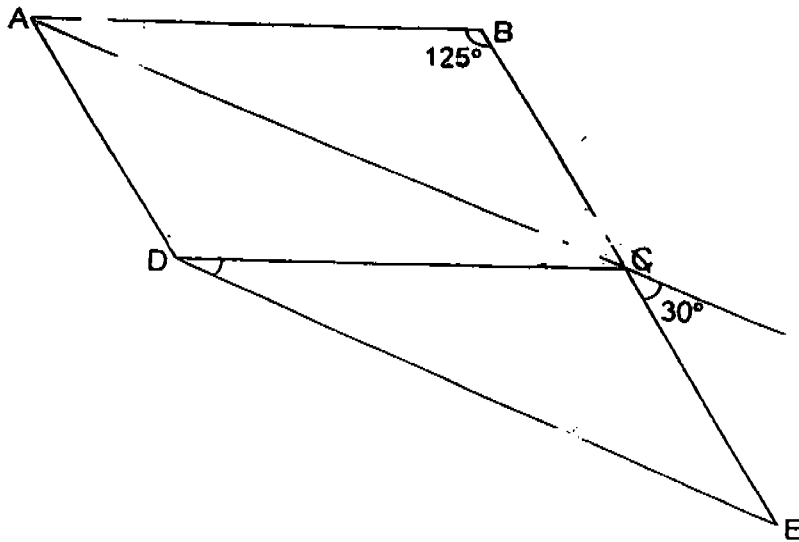
12

- 38 James draws a figure as shown below. The figure is made up of two triangles. Find the area of the shaded portion.



Ans: _____ [3]

- 39 The figure shows two parallelograms ABCD and ACED. Find $\angle CDE$.



Ans: _____ [3]

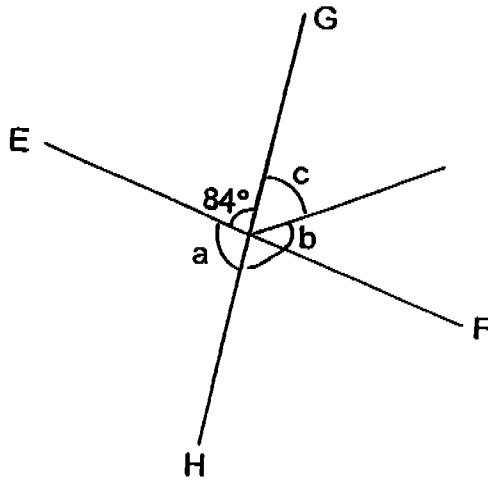
EC & RT

B6

Sub-total

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- 40 In the figure, EF and GH are straight lines. $\angle a$ is three times as large as $\angle b$. Find $\angle c$.



Ans: _____ [3]

- 41 Bert bought 8 similar greeting cards at Bookshop A. He gave the cashier a \$50 note and received \$24 change. Ernie spent $\frac{3}{4}$ as much as Bert to buy 5 similar cards at Bookshop B.

- (a) Which bookshop sold the more expensive card?
 (b) What is the difference in price between the 2 cards?

Ans: (a) _____ [3]

(b) _____ [1]

B7

Sub-total:

- 42 A father has a daughter and twin sons. The sum of their ages is 121 years. The daughter's age is half the father's age and three times the age of each brother.
- (a) How old is the father?
 - (b) What is the total age of the children?

Ans: (a) _____ [3]

(b) _____ [1]

- 43 In 2004, a salesman sold an average of 9 bicycles for the first 8 months. He did not sell any bicycles in the next 4 months.
- (a) On the average, how many bicycles could he sell a month last year?
 - (b) For each bicycle sold, the salesman received \$150. How much money did he receive for the bicycles he sold last year?

Ans: (a) _____ [2]

(b) _____ [2]

EC & RT

B8

Sub-total:

15

44

Barney painted some magnets to sell on 'NOMAD' Day.

$\frac{3}{8}$ of them were red, $\frac{1}{2}$ of them were blue and the rest were yellow.

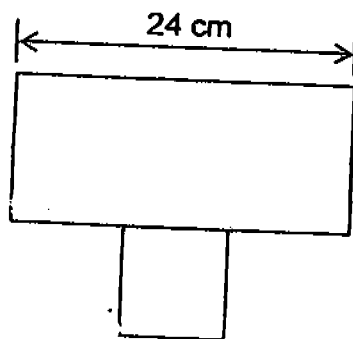
There were 12 more red magnets than yellow magnets. If he sold each magnet for \$0.80, how much money will he get for the sale of all the magnets?

Ans: _____ [4]

- 45 The figure below is made up of a rectangle and a square. The perimeter of the rectangle is longer than that of the square by 32 cm. The ratio of their perimeters is 5 : 3.

(a) Find the breadth of the rectangle.

(b) Find the perimeter of the figure.



Ans: (a) _____ [2]

(b) _____ [2]

EC & RT

89

Sub-total:

46 A train left Station A at 8.30 am. For the first 3h 20 min, it travelled at an average speed of 72 km/h. It then travelled the remaining 325 km at an average speed of 75 km/h before reaching Station B.

- (a) What was the distance between Station A and Station B?
- (b) At what time did the train reach Station B?

Ans: (a) _____ [2]

(b) _____ [2]

47 At a carpark, the parking fee is charged at \$1.50 for the first hour. For each subsequent $\frac{1}{2}$ hour or part thereof, it is charged at \$0.80.

- (a) If a motorist parked his car for 4h 10 min, how much must he pay?
- (b) If the parking charges for the first hour is reduced to \$1.00, how much money would the motorist save for parking the same number of hours?

Ans: (a) _____ [2]

(b) _____ [2]

EC & RT

B10

Sub-total:

48 A box contains pink, red and brown buttons. The ratio of the number of pink buttons to the number of red buttons is 2 : 1 and the ratio of the number of pink buttons to the number of brown buttons is 6 : 1.

- (a) What is the ratio of the number of pink buttons to the total number of red and brown buttons?
- (b) If 60 of the pink buttons are removed and 60 brown ones are added, the pink and brown buttons in the box will be equal in number. What will be the number of brown buttons in the box then?

Ans: (a) _____ [2]

(b) _____ [2]

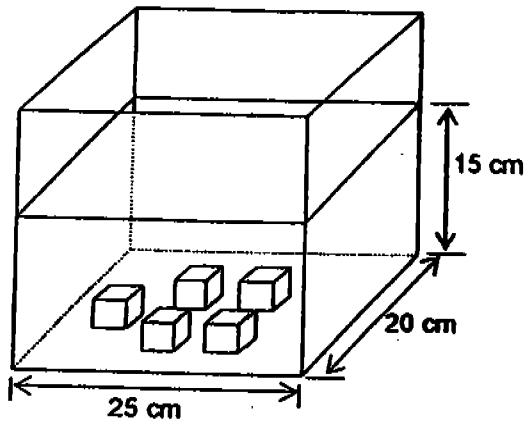
EC & RT

B11

Sub-total:

49 Jacinta placed 5 solid iron cubes each of side 5 cm into an empty tank. Water was then poured into the tank up to a height of 15 cm as shown below.

- (a) Find the volume of water in the tank.
- (b) If 3 of the cubes were removed without any loss of water, what would be the height of the water?



Ans: (a) _____ [3]
(b) _____ [2]

EC & RT

B12

Sub-total:

79

50 Mrs Lim bought some chicken pies and apple pies for \$38. Each apple pie cost \$0.60 and each chicken pie cost \$0.40 more. 60% of what she bought were apple pies.

- (a) How much did she spend on chicken pies?
- (b) How many more apple pies than chicken pies did she buy?

Ans: (a) _____ [3]

(b) _____ [2]

EC & RT

B13

Sub-total

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20

SAT

ANGLO CHINESE SCHOOL (JUNIOR)
SEMESTRAL ASSESSMENT 1 - 2005
MATHEMATICS
PRIMARY 6

- 1) 2
- 2) 4
- 3) 3
- 4) 4
- 5) 4
- 6) 4
- 7) 2
- 8) 3
- 9) 3
- 10) 2
- 11) 3
- 12) 1
- 13) 3
- 14) 1
- 15) 4
- 16) 12 years 8 months
- 17) 11.50 a.m.
- 18) 51.5 kg
- 19) 140
- 20) 145°
- 21) January February
- 22) 12.5%
- 23) 70%
- 24) 2 : 5
- 25) \$ 3.50
- 26) 48
- 27) $1/8$
- 28) $2 \frac{1}{10}$ kg
- 29) $11 \frac{1}{4}$ litres
- 30) 42 children
- 31) 271000
- 32) $7/15$
- 33) 6 hours
- 34) \$ 16
- 35) 9
- 36) $(z-15w)$
- 37) 80 km/h
- 38) 26 cm^2
- 39) 25°
- 40) 64°
- 41) a) Bookshop B b) 65¢
- 42) 66 years old b) 55 years old
- 43) a) 6 bicycles b) \$ 10,800
- 44) \$ 38.40
- 45) a) 16 cm b) 104 cm
- 46) 565 km b) 4.10 p.m.
- 47) a) \$ 7.10 b) 50¢
- 48) a) 3 : 2 b) 84
- 49) a) 6875 cm^3 b) 14.25 cm
- 50) a) \$ 20 b) 10 more apples