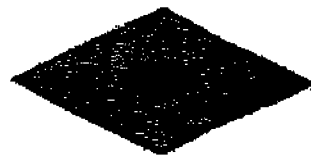


SAL



**NANYANG PRIMARY SCHOOL**  
**SECOND SEMESTRAL EXAMINATION**  
**2005**

**PRIMARY 5**  
**MATHEMATICS**

**DURATION: 2 HOUR 15 MINUTES**

<b>Section A</b>	<b>/ 20</b>
<b>Section B</b>	<b>/ 30</b>
<b>Section C</b>	<b>/ 50</b>

<b>Total:</b>	<b>/ 100</b>
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Name: \_\_\_\_\_ ( )

Class: Primary 5 ( )

Date: 31 October 2005

Parent's Signature: \_\_\_\_\_

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

**FOLLOW ALL INSTRUCTIONS CAREFULLY.**

**ANSWER ALL QUESTIONS.**

75

## **Booklet A**

Questions 1 to 10 carry 1 mark each. Questions 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 the oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

---

1 Find the value of  $50 - (5 + 3) \times 4$ .

- (1) 18
- (2) 57
- (3) 168
- (4) 192

2 Find the value of  $2\frac{1}{4} \times \frac{1}{3}$ .

- (1)  $\frac{1}{12}$
- (2)  $\frac{1}{6}$
- (3)  $\frac{3}{4}$
- (4)  $2\frac{1}{12}$

3 Mrs Lee bought 63 packets of sweets and Mrs Wong bought 37 packets of sweets. If the mass of each packet of sweets is 60.5 g, what is the total mass of all the packets of sweets bought?

- (1) 0.605 kg
- (2) 6.005 kg
- (3) 6.05 kg
- (4) 60.5 kg

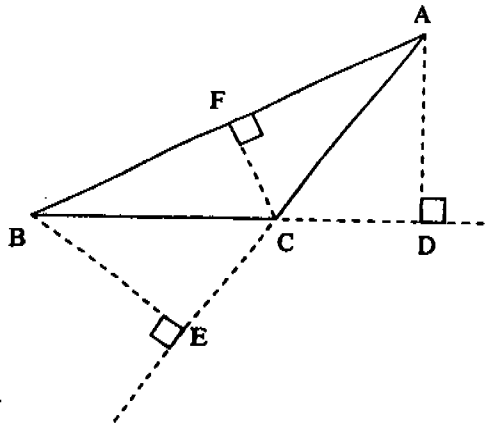
4 Ravi cut a piece of string into 10 pieces, each with a length of 208 cm. What was the original length of the string?

- (1) 0.208 m
- (2) 2.008 m
- (3) 2.08 m
- (4) 20.8 m

5 Express  $\frac{3}{8}$  as a percentage.

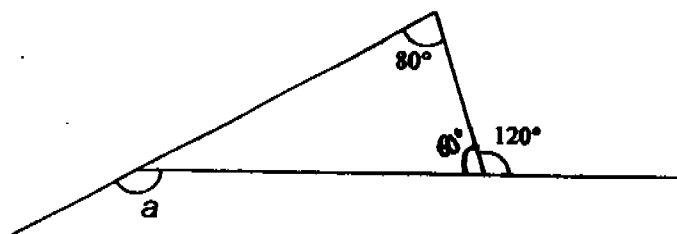
- (1) 0.125%
- (2) 0.375%
- (3) 12.5%
- (4) 37.5%

6 Study the figure below. If AC is the base of  $\triangle ABC$ , what is its height?



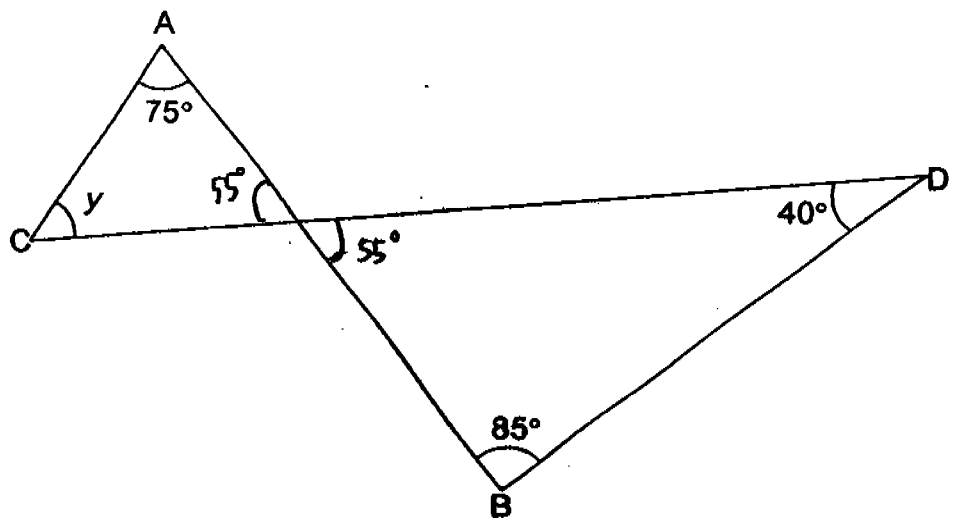
- (1) AD
- (2) BC
- (3) BE
- (4) CF

7 In the figure below, which is not drawn to scale, find  $\angle a$ .

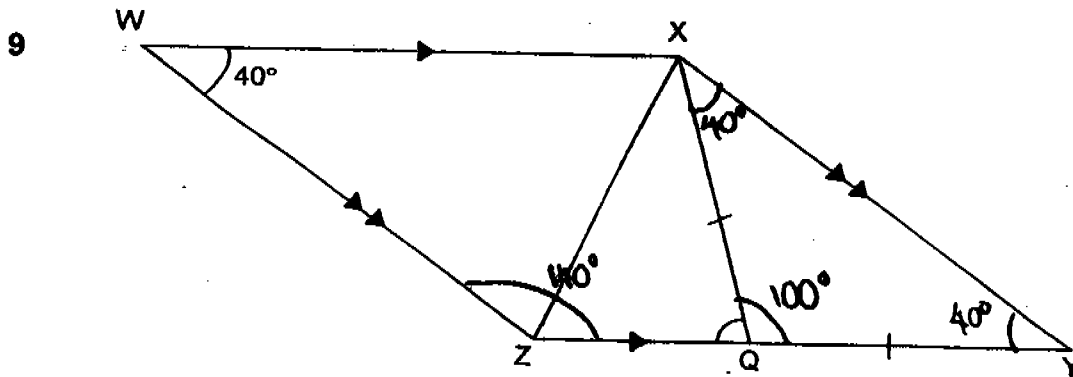


- (1)  $40^\circ$
- (2)  $60^\circ$
- (3)  $120^\circ$
- (4)  $140^\circ$

8 AB and CD are straight lines. Find  $\angle y$ .



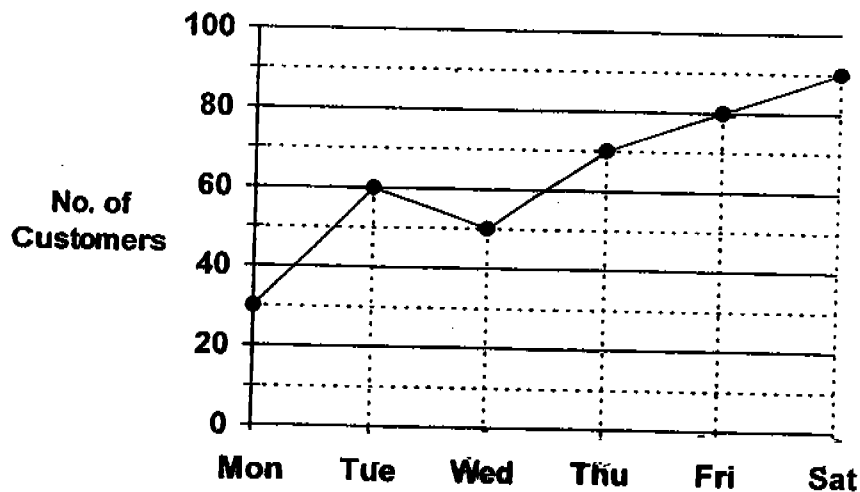
- (1)  $40^\circ$
- (2)  $50^\circ$
- (3)  $55^\circ$
- (4)  $85^\circ$



WXYZ is a parallelogram and XQY is an isosceles triangle.  
Find  $\angle XQZ$ .

- (1)  $40^\circ$
- (2)  $80^\circ$
- (3)  $100^\circ$
- (4)  $140^\circ$

10 The graph below shows the number of customers who went to Plaza Music Shop.



On which two days was the difference in the number of customers more than 10 but less than 30?

- (1) Monday and Tuesday
- (2) Tuesday and Thursday
- (3) Wednesday and Thursday
- (4) Thursday and Friday

- 11 The table below shows the number of books read by Russell from January to April.

Month	Number of books
January	30
February	?
March	28
April	24

Russell read an average of 32 books over the 4 months. How many books did he read in February?

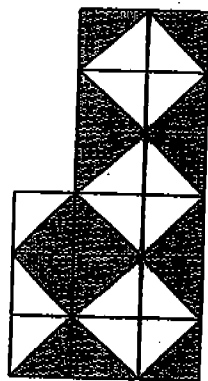
- (1) 14  
(2) 46  
(3) 50  
(4) 128
- 12 The table below shows the parking rates at Lavender Car Park.

Parking Rates	
First hour	\$ 2.50
Every additional $\frac{1}{2}$ hour or part thereof	\$ 1.00

Davis wants to park his van at the car park from 10.00 a.m. to 3.10 p.m. on the same day. How much does he have to pay?

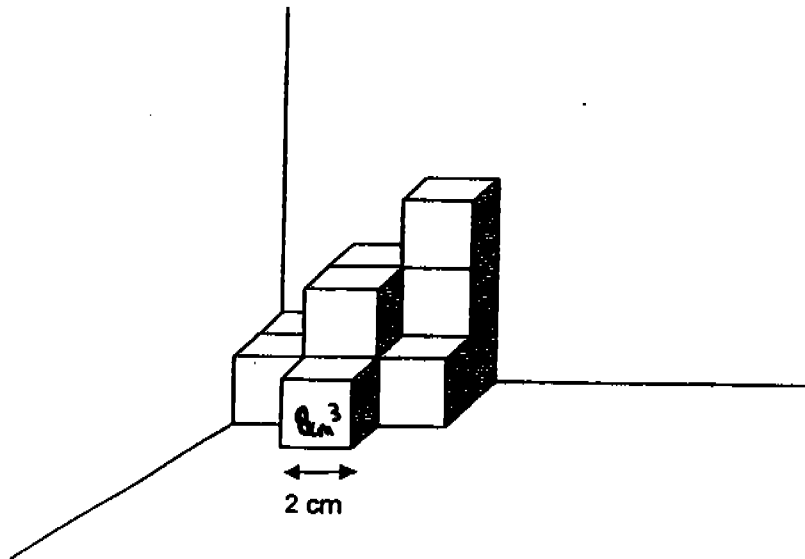
- (1) \$7.00  
(2) \$7.50  
(3) \$11.00  
(4) \$11.50

- 13 How many more triangles must you shade so that the ratio of the unshaded parts to the shaded parts is 2 : 3 ?



- (1) 1  
(2) 2  
(3) 3  
(4) 4
- 14 Weihao read a book from page 1 to page 59 without skipping any page. What is the sum of all the page numbers?
- (1) 1740  
(2) 1770  
(3) 1780  
(4) 1800

- 15 Cubes of sides 2 cm are stacked in one corner of a box as shown. What is the total volume of the cubes used?



- (1)  $18 \text{ cm}^3$
- (2)  $22 \text{ cm}^3$
- (3)  $72 \text{ cm}^3$
- (4)  $88 \text{ cm}^3$



Name: \_\_\_\_\_ ( ) Class: Pr 5 ( )

P5 SA2 2005

**Booklet B**

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions that require units, give your answers in the units stated.

(10 marks)

16 In 9 623 501, the digit 6 is in the \_\_\_\_\_ place.

Ans: \_\_\_\_\_

17 What is the missing number in the box?

$$12 + \square \div 4 = 30$$

Ans: \_\_\_\_\_

18 Multiply 3.08 by 25.

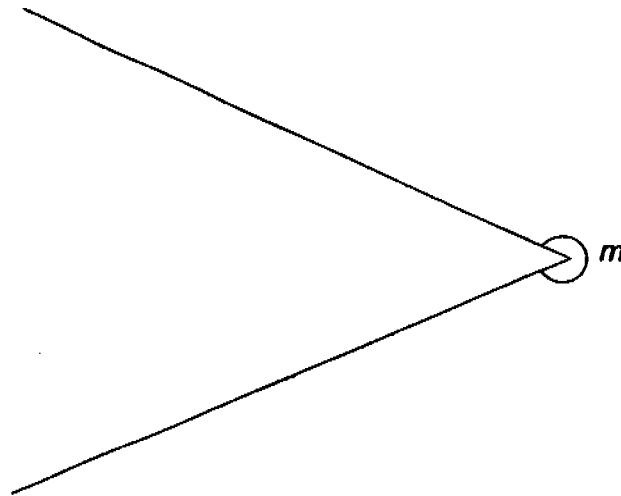
Ans: \_\_\_\_\_

19 Aminah needs 5 teaspoons of baking powder to bake 3 cakes. How many teaspoons of baking powder will she need if she bakes 12 cakes?

Ans: \_\_\_\_\_

---

20 Measure  $\angle m$ .



Ans: \_\_\_\_\_<sup>o</sup>

---

21 Mrs Soh mixed 500 ml of orange squash with 4.5 litres of water. She poured the mixture equally into 100 glasses. What was the amount of mixture in each glass?

Ans: \_\_\_\_\_ ml

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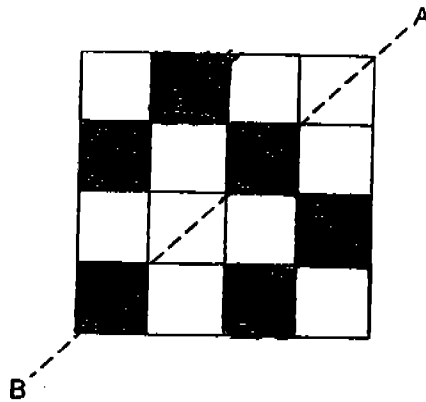
22 Express 4% as a decimal.

Ans: \_\_\_\_\_

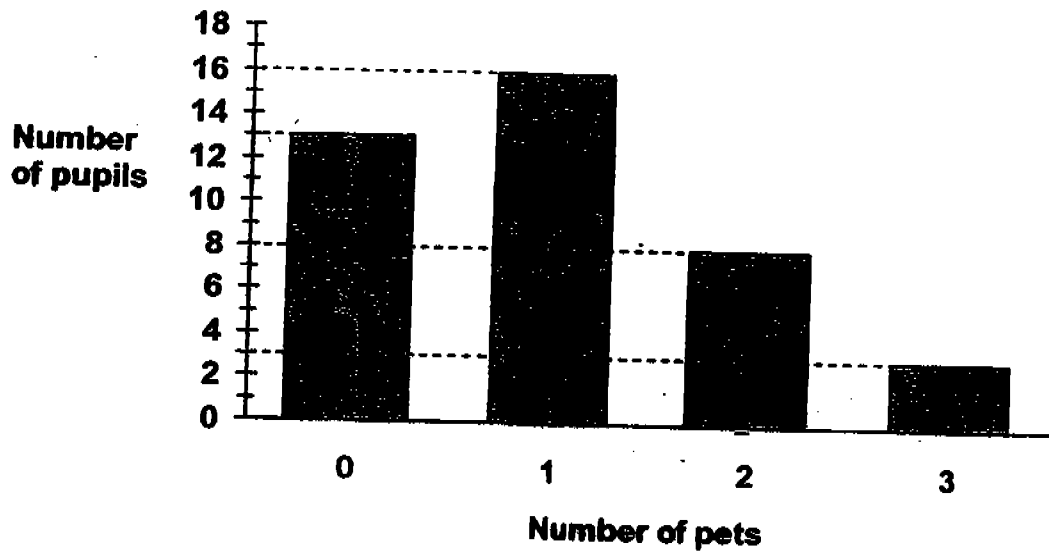
23 A factory produces 132 candy bars every 4 minutes. How many candy bars can it produce in an hour?

Ans: \_\_\_\_\_

24 Shade 2 more squares to complete the figure which has the dotted line AB as a line of symmetry.



25 The graph below shows the number of pets owned by some pupils.



Find the total number of pets owned by the pupils.

Ans: \_\_\_\_\_

Name: \_\_\_\_\_ (       )       Class: Pr 5 (       )

P5 SA2 2005

Questions 26 to 35 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(20 marks)

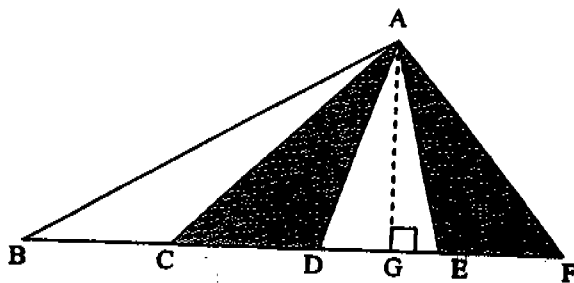
- 
- 26    Lena has 24 erasers and Muthu has 20 erasers. How many erasers must Muthu give to Lena so that she will have thrice the number of erasers that Muthu has?

Ans: \_\_\_\_\_

- 
- 27     $\frac{3}{5}$  of the class failed their Mathematics test. If 24 pupils passed the test, how many pupils failed the test?

Ans: \_\_\_\_\_

- 28 In the figure below,  $BD = 10$  cm,  $DF = 8$  cm,  $BC = CD$ ,  $DE = EF$  and  $AG = 6$  cm. Find the total area of the shaded parts.



Ans: \_\_\_\_\_  $\text{cm}^2$

- 29 There are 4 times as many apples as pears. If the ratio of the number of oranges to the number of pears is  $2 : 3$ , what is the ratio of the number of oranges to the number of pears to the number of apples?

Ans: \_\_\_\_\_

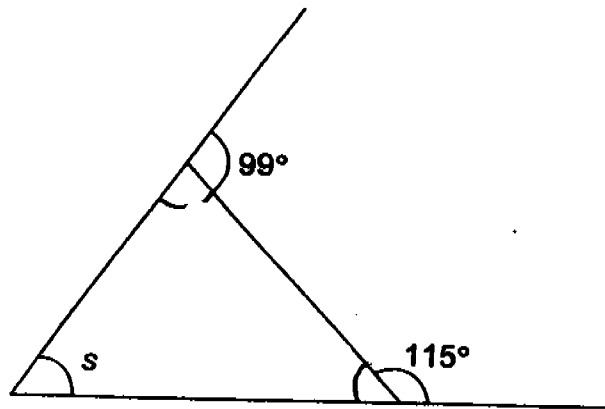
- 30 Jiawei gave 40% of his prize money to the National Cancer Centre and spent  $\frac{1}{2}$  of the remainder on stationery. If he had \$120 left, how much was his prize money?

Ans: \$ \_\_\_\_\_

- 
- 31 The average mass of 4 boys is 36.5 kg. When one boy left, the average mass of the remaining boys is 36 kg. What is the mass of the boy who has left?

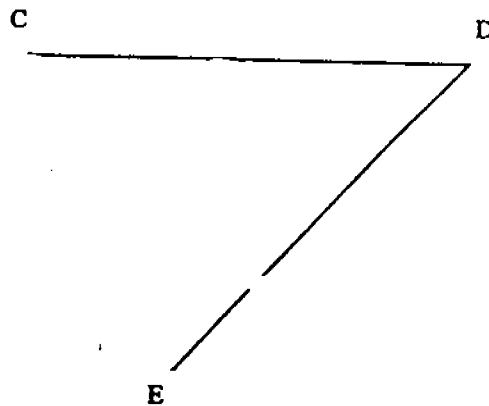
Ans: \_\_\_\_\_ kg

- 32 The figure below is not drawn to scale. Find  $\angle s$ .



Ans: \_\_\_\_\_<sup>o</sup>

- 33 CD and DE are two sides of a rhombus. Draw the (rhombus) CDEF by completing the figure below.





- 34 Mina spent 0.6 of her money to buy 4 pens. She bought another 2 pens and 3 rulers with the rest of her money. How many more rulers could Mina buy if she spent all her money on rulers instead?

Ans: \_\_\_\_\_

---

- 35 The price of a 39-inch TV set was \$3 500. Mr Samad made a down payment of \$500 and paid the remaining amount in equal monthly instalments for 2 years. How much did he pay for each monthly instalment?

Ans: \$ \_\_\_\_\_

---

Name: \_\_\_\_\_ (       )                      Class: Pr 5 (       )

P5 SA2 2005

For questions 36 to 48, 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 brackets [     ] at the end of each question or part-question.

(50 marks)

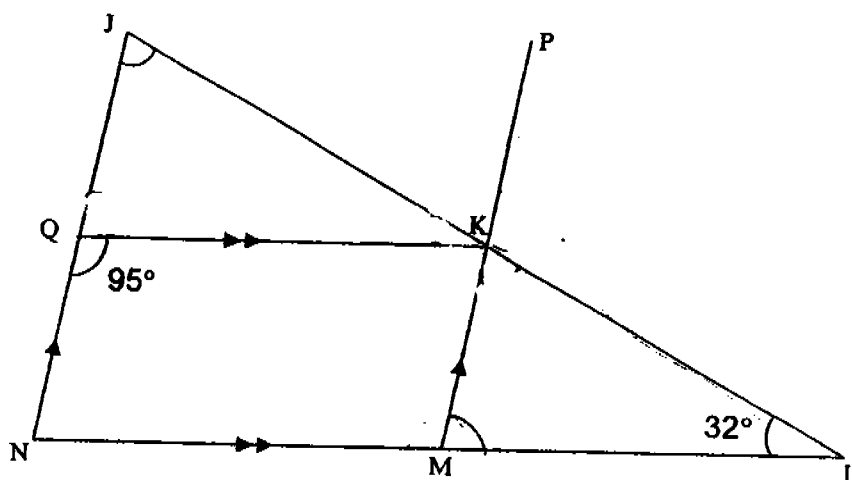
- 
- 36    There were 25 questions in a Mathematics quiz. 4 marks were awarded for every correct answer and 2 marks were deducted for every wrong answer. Sally obtained 58 marks. How many questions did she answer correctly?

Ans: \_\_\_\_\_ [3]

- 
- 37    Yu Xin scored an average of 72 marks for her 3 English tests in Term 1. She sat for another 2 more tests in Term 2. The difference in the scores for these 2 tests is 8 marks. Her average score for the 5 tests is 80 marks. Find her better score in Term 2.

Ans: \_\_\_\_\_ [3]

- 38 In the figure below, not drawn to scale, PM, JN and JL are straight lines. QK // NM and JN // PM.

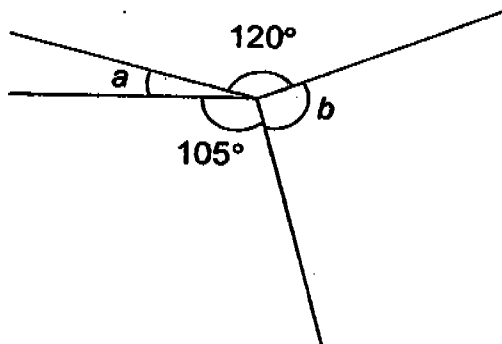


- (a) Find  $\angle KJQ$ .  
(b) Find  $\angle PKL$ .

Ans: (a) \_\_\_\_\_ [2]

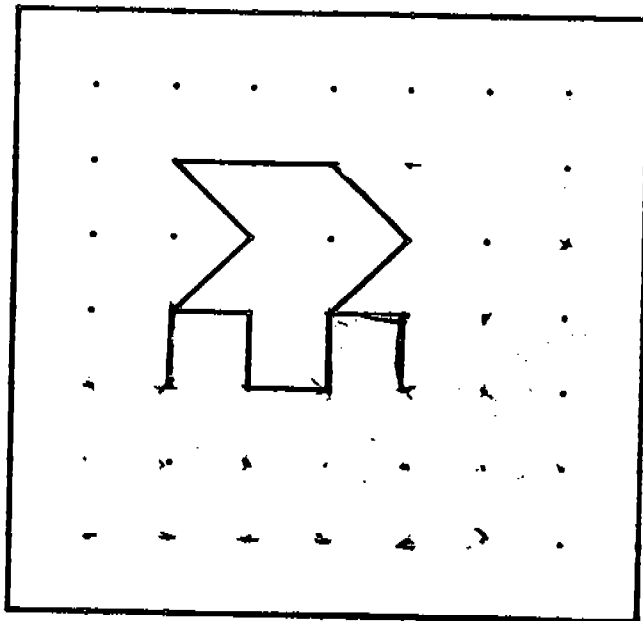
(b) \_\_\_\_\_ [1]

- 39 In the figure below, which is not drawn to scale,  $\angle a : \angle b$  is  $1 : 4$ . Find  $\angle b$ .



Ans: \_\_\_\_\_ [3]

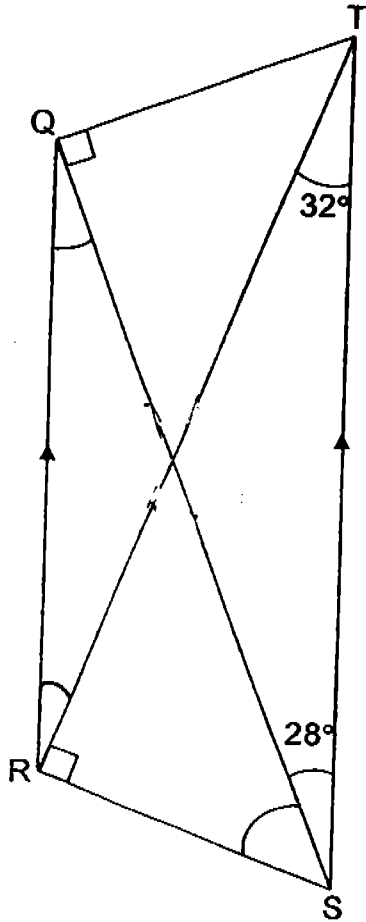
- 40 Extend the tessellation by drawing **three more** unit shapes in the space provided. (3m)



41 In the figure shown below, not drawn to scale, QRST is a trapezium. RT and QS are straight lines.  $\angle SRT$  and  $\angle SQT$  are right angles.

(a) Find  $\angle RSX$ .

(b) Find  $\angle RQX$ .



Ans: (a) \_\_\_\_\_ [1]

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

- 42 Ahmad had 195 Australian and New Zealand stamps. He gave away  $\frac{5}{7}$  of the Australian stamps and  $\frac{3}{4}$  of the New Zealand stamps. After that, he had an equal number of Australian and New Zealand stamps left. How many stamps did Ahmad give away?

Ans: \_\_\_\_\_ [4]

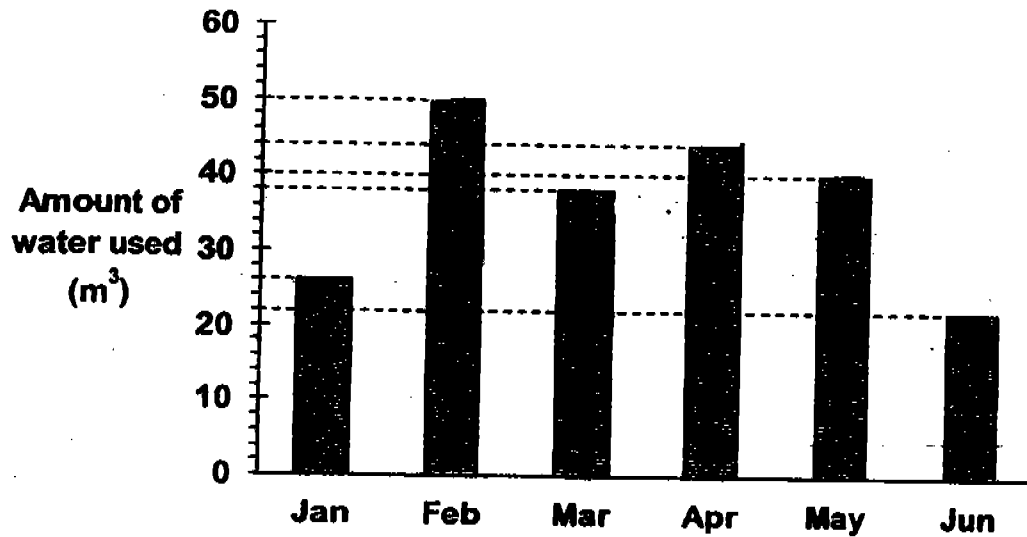
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- 43 For every 3 files bought, 1 file was given free. Jason spent \$9.60 and got 8 files. How many files could he get if he had spent \$99.20?

Ans: \_\_\_\_\_ [4]

---

- 44 The graph below shows the amount of water used in Mr Tan's household over a period of 6 months.



- (a) What is the average amount of water used by Mr Tan's family from March to June?
- (b) Express the amount of water used in March as a fraction of the total amount of water used in the 6 months. Give your answer in its simplest form.

Ans: (a) \_\_\_\_\_ [2]

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



45 The ratio of the number of papayas to the number of mangoes in Box A and in Box B are 2 : 1 and 2 : 7 respectively. Box A has  $\frac{2}{3}$  times as many fruit as Box B.

- (a) Find the ratio of the number of papayas in Box A to the number of papayas in Box B.
- (b) When 18 mangoes are moved from Box B to Box A, the ratio of the number of papayas to the number of mangoes in Box A becomes 8 : 7. How many mangoes are there in Box A now?

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [3]

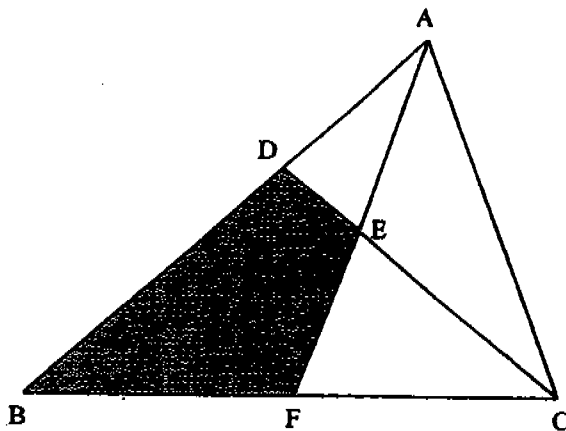
**46** Bala always saves 20% of his monthly salary. However, his salary for October was 5% more than that for September. As a result, his savings in October was increased by \$45.

- (a) What was his salary in October?
- (b) What was his total savings in September and October?

Ans: (a) \_\_\_\_\_ [3]

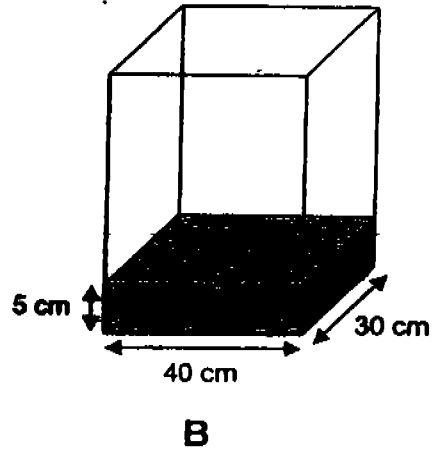
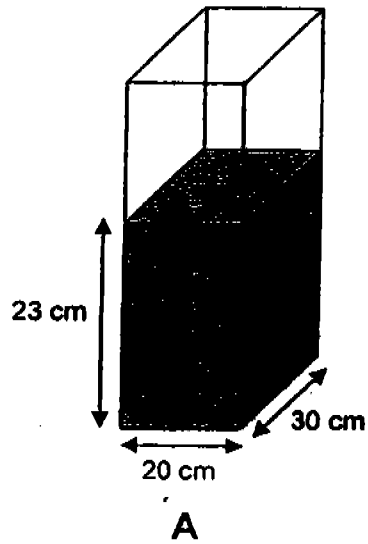
(b) \_\_\_\_\_ [2]

- 47 The diagram below is not drawn to scale. The length of  $BD$  is twice the length of  $DA$ .  $E$  and  $F$  are the mid-points of  $AF$  and  $BC$  respectively. If the area of  $\triangle ABC$  is  $36 \text{ cm}^2$ , what is the shaded area?



Ans: \_\_\_\_\_ [5]

- 48 Container A and Container B were filled with some water as shown in the diagram below. David poured some water from Container A into Container B such that the height of the water in both containers was the same. Find the new height of the water level.



Ans: \_\_\_\_\_ [5]

*Have you checked your work?*

**END OF PAPER**

Setters: Mrs Nancy Lum, Mr Brandon Ng, Mrs Goh Oon Tong

Nanyang Primary School  
Primary 5 Maths SA2 Exam (2005)

*Exam Solutions*

## Answer Sheets

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

16. Hundred thousands  
 17. 72  
 18. 77  
 19. 20 teaspoon  
 20.  $312^\circ$   
 21. 50  
 22. 0.04  
 23. 1980 candy bars

24. 


25. 41 pets  
 26. 9 erasers  
 27. 36 pupils  
 28. 27  
 29. 2 : 3 : 12  
 30. 400  
 31. 38  
 32. 34

33.  
 34. 27 rulers  
 35. 125  
 36. 18 questions  
 37. 96 marks  
 38. a)  $63^\circ$       b)  $117^\circ$   
 39.  $108^\circ$   
 40.

41. a)  $30^\circ$       b)  $28^\circ$

42. 143 stamps  
 43. 82 files  
 44. a)  $36m^3$       b)  $\frac{19}{110}$   
 45. a) 2 : 1      b) 42 mangoes  
 46. a) 4725      b) \$1845  
 47.  $15cm^2$   
 48. 11cm