NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 – 2006
MATHEMATICS
PRIMARY 6

BOOKLET A

15 Questions

20 marks

Total Time for Booklet A & B: 2 h 15 min

INSTRUCTIONS TO CANDIDATES

DO NOT OPEN THE BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS

Section	Maximum Marks	Actual Marks
A	20	
B + C	80	
Total	100	

Name: _____ ( )

Class: Pr 6 _____

Date: 28 February 2006

Parent's Signature: _____

SECTION A (20 marks)

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 correct oval on the Optical Answer Sheet.

1. The odometer of a car shows 15 495km. Approximately how many thousand kilometres is that?

   (1) 15 400km

   (2) 15 500km

   (3) 15 000km

   (4) 16 000km

2. Express $2\frac{3}{4}$ km in metres.

   (1) 2.75m

   (2) 27.5m

   (3) 275m

   (4) 2750m

3. $\frac{2}{5}$ of a class of 40 pupils are girls. There are _____ boys in the class.

   (1) 40

   (2) 24

   (3) 16

   (4) 8

4. $\frac{2}{5} \times \frac{1}{4}$ is the same as _____.

(1) 0.1

(2) 0.2

(3) 10

(4) 20

5. Round off 67.478 to the nearest **hundredth**.

(1) 67.4

(2) 67.47

(3) 67.48

(4) 67.5

6. The ratio of Tom's money to Patrick's money is 4:7. They have $99 altogether. How much money has Patrick?

(1) $9

(2) $11

(3) $63

(4) $77

7. 6 pairs of gloves cost $15. How many pairs of gloves can you buy with $105?

(1) 7

(2) 42

(3) 90

(4) 120

8. $2\frac{3}{4}$ expressed as a ratio is $\square$: 4

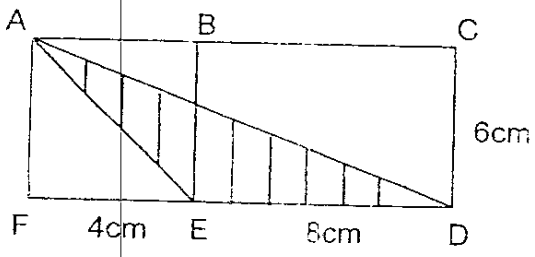
(1) 5

(2) 2

(3) 3

(4) 11

9. What is the area of the shaded triangle ADE?



(1) 36 cm^2

(2) 24 cm^2

(3) 16 cm^2

(4) 12 cm^2

10. There were 2 500 spectators at a soccer match on Friday. The number of spectators increased by 20% on Saturday. There were _____ spectators at the soccer match on Saturday.

(1) 3 000

(2) 2 000

(3) 500

(4) 20

11. 6 868 people took part in a walkathon. Of these, 623 people gave up after the 1st hour. Another $\frac{1}{5}$ of the remaining people gave up after the 2nd hour. The rest completed the walkathon. How many people completed the walkathon?

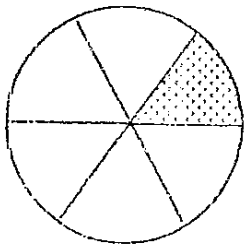
(1) 1 249

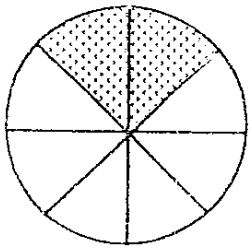
(2) 1 872

(3) 4 996

(4) 6 245

12. The 2 circles below are identical in size. Each of them is divided into equal parts. What fraction of the 2 circles is shaded?





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

(2) $\frac{3}{14}$

(3) $\frac{3}{11}$

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

13. A piece of ribbon 12.96 m long is cut into 4 pieces. The length of the first 3 pieces is 3.05m each. What is the length of the fourth piece of ribbon?

(1) 3.24 m

(2) 3.81 m

(3) 9.15 m

(4) 9.72 m

14. Desmond and Joshua share some stickers. For every 4 stickers Desmond gets, Joshua gets 3 stickers. If Desmond gets 56 stickers, how many stickers are there altogether?

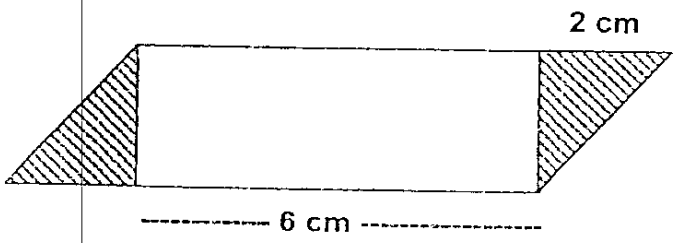
(1) 98

(2) 42

(3) 14

(4) 7

15. The figure below shows a parallelogram ABCD. When the shaded parts are cut off, the remaining area is 24 cm^2. What is the area of **each** shaded part?



(1) 6 cm^2

(2) 8 cm^2

(3) 24 cm^2

(4) 4 cm^2

Nan Hua Primary School
Continual Assessment 1 – 2006
Mathematics - Primary 6

BOOKLET B

Name : _____ ( ) Class: Primary 6 _____

SECTION B

Mental Sums(5 marks)
Questions 16 to 20 carry 1 mark each. Listen carefully and write the answers in the blanks provided.

16. _____ %

17. _____ cm

18. _____ name cards

19. $ _____

20. _____ kg

Questions 21 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

21. Find the value of $30 + 14 - (42 \div 6)$

Ans: _____.

22. A clock loses 10 seconds for every hour. How many minutes slow will the clock be after one day?

Ans: _____ min

23. A sum of money was divided between Jack and Kenny in the ratio 1 : 4. What percentage of the money did Kenny receive?

Ans: _____ %

24. Malika saves $\frac{3}{8}$ of her salary every month. What percentage of her salary does she save each month?

Ans: _____ %

25. A flask holds $\frac{3}{4}$ litres of syrup. It is poured into 5 similar cups.
The capacity of each cup is _____.

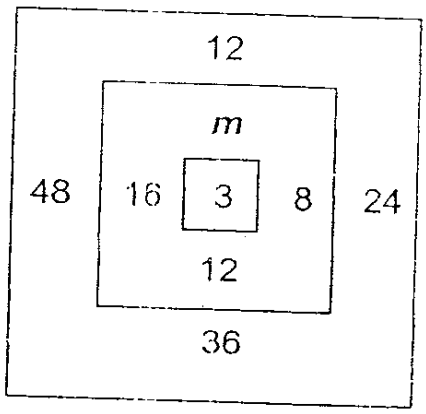
Ans: _____ litres

Questions 26 to 35 carry 2 marks each. Show your workings 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. The sum of the page numbers of two facing pages of a book is 265.
What are the two page numbers?

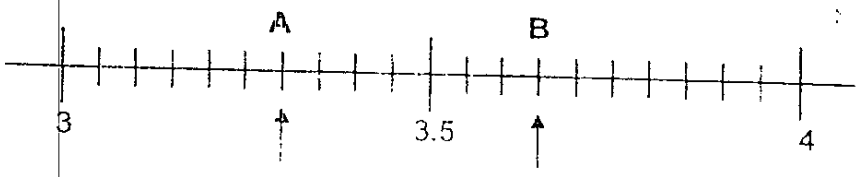
Ans: _____

27. In the diagram below, the numbers are related in some ways.
What is the value of m ?



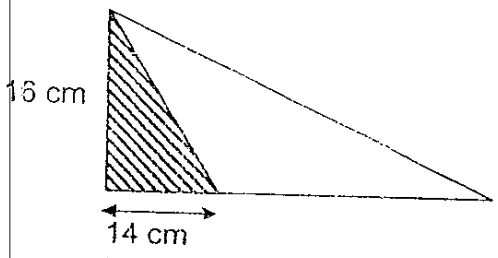
Ans: _____

28. What is the difference in value between A and B?



Ans: _____

29. The figure below is not drawn to scale. The unshaded area is 1 ½ times the shaded area. Find the area of the whole figure.



Ans: _____ cm²

30. The ratio of Kumar's age to his father's age now is 1 : 5.
Their total age is 48 years old. How old will Kumar be in 2 years' time?

Ans: _____ years old

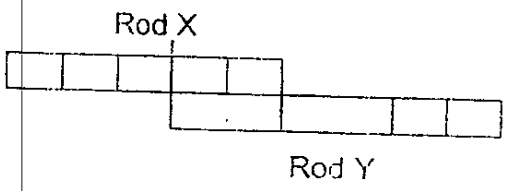
31. The ratio of the number of men to the number of women to the number of children at a cinema is 8:5:2 respectively. What is the percentage of women at the cinema?

Ans: _____ %

32. Mrs Tan made 225 pineapple tarts for the new year. The children ate $\frac{3}{5}$ of the tarts. The adults ate 48 of them. How many tarts were left?

Ans: _____ tarts

33. In the diagram below, $\frac{2}{5}$ of Rod X is joined to $\frac{1}{3}$ of Rod Y. Express the length of Rod X as a fraction of Rod Y.



Ans: _____

34. 2 watches and a ring cost $540. If a watch and a ring cost $380, what is the cost of 4 such watches?

Ans: $_____

35. The area of a square is 16 cm^2. The perimeter of an equilateral triangle is 48 cm. What is the ratio of the side of the equilateral triangle to the side of the square? Give your answer in its simplest form.

Ans: _____

Section C (50 marks)

For questions 36 to 48, show your workings clearly in the space provided for each question and write your answers in the spaces provided.
The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

36. The different symbols shown in the table below all have different values. The total value of the symbols in each row and in each column is given. Find the value of each symbol.

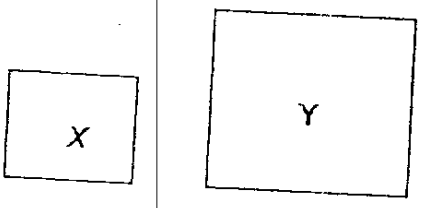
☺	☺	⧗	10
◈	◈	⧗	14
⧗	◈	☺	12
12	13	11	

Answer: ☺ _____ [1]

⧗ _____ [1]

◈ _____ [1]

37. The perimeter of square X is 20 cm. The perimeter of square Y is 48 cm.
a) Find the difference in length of each side of the squares.
b) What is the total area of X and Y?



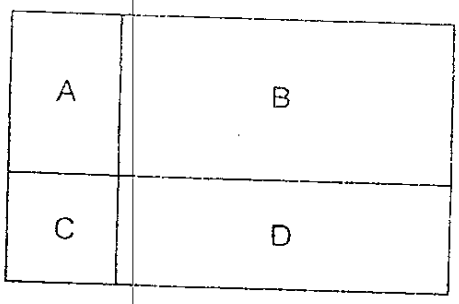
Answer: a) _____ [1]

b) _____ [2]

38. A farmer has a farm which is 25 metres long. The width of the farm is half its length. He buys 4 similar rolls of wire to make a fence round the farm. The wire is exactly enough for him to go round the farm with 0.6m left over. What is the length of each roll of wire?

Answer: _____ [3]

39. The figure below shows a rectangle divided into 4 parts A, B, C and D. The areas of A, B and C are in the ratio 8 :21 : 4 respectively. C is a square with an area of $16cm^2$. Find the area of rectangle D.



Answer: _____ [3]

15

40. Benny and Carol shared a sum of $640. After Benny had spent 0.4 of his money and Carol spent $140, they each had the same amount of money left. How much money did each one of them have at first?

Answer: _____ [3]

41. 6 tailors can sew 36 pairs of pants in 3 days. If all the tailors sew at the same speed, how many pairs of pants can 9 tailors sew in 8 days?

Answer: _____ [3]

42. Lily paid \$54 for a bag. She spent $\frac{3}{7}$ of the remaining money on a skirt and the rest of her money on a blouse. The blouse cost 25% of the total amount of money that she had. How much money had she at first?

Answer: _____ [4]

43. The mass of a tank filled with sand was 16.47kg. Peter poured out half of the sand and weighed it. He found that the mass of the sand which was poured out was 4 times the mass of the tank when it was empty. Later, he poured the remaining sand in the tank equally into 2-kg boxes and still had some sand left in the tank.

a) How many 2-kg boxes of sand were there?
b) What was the mass of the tank and the sand that remained in the ~~box~~ tank?

Answer: a) _____ [3]

b) _____ [1]

44. 30% of the seats in a cinema were red and the rest were blue. When the number of red seats was decreased by 25% and the number of blue ones increased by half, Guo Liang found that there were 66 seats more. How many seats were there in the cinema at first?

Answer: _____ [4]

45. On 2 April Mr Lee withdraw 40% of his savings from the bank. He spent $370 and had $150 left. At the end of the month, he deposited 30% of his salary in the bank and his savings became $1 410.

a) How ~~many~~ much savings had he left in the bank on 2 April?
b) What was his monthly salary?

Answer: a) _____ [2]

b) _____ [3]

10

46. There are 156 rambutans, some durians, mangosteens and pears at a fruit stall. The ratio of the number of rambutans to the number of durians is 2 : 5. The ratio of the number of mangosteens to the number of pears is 3 : 7.

a) If there is an equal number of rambutans and mangosteens at the stall, how many pears are there?
b) What fraction of the fruits is mangosteens?

Answer: a) _____ [2]

b) _____ [3]

27. Paul and James had $510 altogether. Paul gave 40% of his money to his father and James spent 75% of his money. Then they had an equal amount of money left.

a) How much money had James at first?

b) How much money did Paul give to his father?

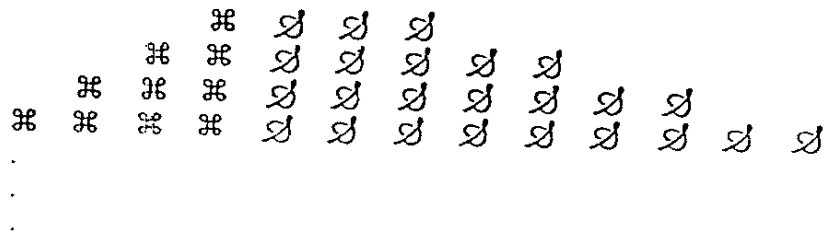
Answer: a) _____ [3]

b) _____ [2]

22

48. a) Study the pattern below carefully

Pattern 1:
Pattern 2:
Pattern 3:
Pattern 4:



.
.
.

Complete the table below by filling in the brackets:

	⌘	♂	Total number of objects	Difference between ⌘ and ♂
Pattern 1	1	3	4	2
Pattern 2	2	5	7	3
Pattern 3	3	7	10	4
Pattern 4	4	9	13	5
Pattern 5	5	( )	16	6
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
Pattern 20	20	( )	( )	21

[1]

[2]

b) In which pattern are there 39 more ♂ than ⌘?

Answer: b) _____ [2]

End of Paper

Nan Hua Primary School

Primary 6 Maths CA1 Exams (2006)

Answer Sheets

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

16. **40%**
17. 15cm
18. **350 name cards**
19. **$75**
20. **0.05kg**
21. **37**
22. **4 minuste80%**
23. **80%**
24 **37.5%**
25. **0.15litres**

26.	132, 133	27.	4
28.	0.35	29.	280cm²
30.	10 years old	31.	$33\frac{1}{3}\%$
32.	42 tarts	33.	$\frac{5}{6}$
34.	$640.00	35.	4 : 1
36.	3, 4, 5	37a.	48 ÷ 4 = 12 20 ÷ 4 = 5 = 12 – 5 = 7cm The different = 7cm
		37b.	12 x 12 = 144 (Y) 5 x 5 = 25 (X) 144 + 25 = 169 The total area is 169cm² (Ans)

38.	**25 ÷ 2 = 12.5 (W)** **25 + 12.5 + 25 + 12.5 = 75** **= 75 + 0.6 = 75.6** **75.6 ÷ 4 = 18.9** **The length of each roll wire = <u>18.9m</u>**	**39.**	**A : B : C** **8 : 21 : 4** **32 : 84 : 16** **16 = 4 x 4 (length of D)** **32 ÷ 4 = 8 (length of B)** **84 ÷ 8 = 10.5 (length of D)** **= 10.5 x 4 = 42** **The area = <u>42cm²</u>**
40.	**640 – 140 = 500** **16u = 500** **4u = 125** **2u = 62.5** **10u = $312.5 (Benny)** **6u = 187.5** **= 187.5 + 140 = $327.5 (Carol)** **Benny had <u>$312.50</u> and Carol had <u>$327.50</u> at first.**	**41.**	**6 tailors = 36 pants in 3 days** **3 tailors = 18 pants in 3 days** **3 tailors = 6 pants in 1 day** **3 tailors = 48 pants in 8 days** **9 tailors = 144 pants in 8 days** **9 tailor can sew 144 pairs of pants in 8 days.**
42.	$\frac{16}{16} - \frac{7}{16} = \frac{9}{16}$ **9 u = $54.00** **1u = $6.00** **16 u = $96.00** **She had <u>$96.00</u> at first.**	**43.** **a.** **b.**	$\frac{1}{2}$ **sand = 4u** **1 sand = 8u** **Tank = 1u** **8 + 1 =9** **9u = 16.47** **4u = 7.32** **= 7.32 ÷ 2** **= 3 remainder 132** **There were <u>3</u> 2kg of boxes of sand.** **1.32 + 1.83 = 3.15** **The mass was <u>3.15kg</u>**

44.	$\frac{75}{100}$ x 30 = 22.5 100 – 30 = 70 $1\frac{1}{2}$ x 70 = 105 105 + 22.5 = 127.5 127.5 – 100 = 27.5 27.5% = 66 0.5% = 1.2 1% = 2.4 100% = 240 There were <u>240 seats</u> in the cinema at first.	45.	370 + 150 = 520 40% = 520 10% = 130 60% = 780 a. He had <u>$780.00</u> left b. 1410 – 780 = 63 0 30% = 630 10% = 210 100% = 2100 His month salary is <u>$2100.00</u>
46. a. b.	156 ÷ 3 = 52 52 x 7 = 364 There are <u>364 pears</u>. 6 ÷ (6 + 15 + 6 + 14) = $\frac{6}{41}$ $\frac{6}{41}$ of the fruits are mangoesteens.	47. a. b.	34u = 510 1u = 15 24u = 360 James had $360 at first 1u = 15 4u = 60 Paul gave <u>$60</u> to his father.
48a. 48b.	Pattern 5 : (11) Pattern 20 : (41), (61) 39 – 1 = <u>38</u> (Ans) There are 39 more in pattern <u>38</u>.		