# AI TONG SCHOOL

## 2007

## SEMESTRAL ASSESSMENT 1

## PRIMARY 5

## MATHEMATICS

DURATION : 2 h 15 min

DATE : 11 May 2007

**INSTRUCTIONS**

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

Name : _____ (  )

Class : Primary 5_____ Marks: 100

Parent's Signature : _____

Date : _____

62

## 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 An aeroplane travelled 69 570 km. Round off this distance to the nearest 1000 km.

(1) 69 000 km
(2) 69 500 km
(3) 69 600 km
(4) 70 000 km

2 Tina saves $57 a month. How much will she save in 2 years?

(1) $114
(2) $684
(3) $1140
(4) $1368

3 Which of the following fractions is NOT equivalent to $\frac{2}{3}$?

(1) $\frac{8}{12}$
(2) $\frac{10}{15}$
(3) $\frac{12}{18}$
(4) $\frac{14}{16}$

4 Which of the following fractions has the greatest value?

(1) $\frac{3}{4}$
(2) $\frac{4}{5}$
(3) $\frac{9}{10}$
(4) $\frac{11}{15}$

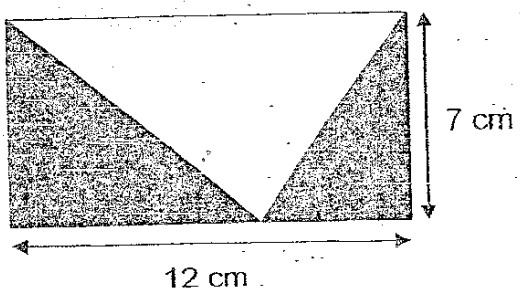
5 What is $\frac{3}{4}$ of 1 h 4 min?

(1) 16 min
(2) 45 min
(3) 48 min
(4) 78 min

6 Find the missing value in $3\frac{1}{2} + \boxed{\ ?\ } = 7\frac{5}{8}$.

(1) $4\frac{1}{8}$
(2) $4\frac{2}{3}$
(3) $10\frac{3}{5}$
(4) $11\frac{1}{8}$

7 The figure shows a rectangle. What is the area of the shaded parts?
(The figure is not drawn to scale.)




(1) 18 $cm^2$
(2) 24 $cm^2$
(3) 42 $cm^2$
(4) 84 $cm^2$

8 There are 48 pens and 64 pencils in a container. What is the ratio of the number of pencils to the number of pens?

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

64

9 What is the sum of the fourth multiple of 8 and the sixth multiple of 3?

(1) 50
(2) 48
(3) 14
(4) 11

10 What is 100 tens less than 1 million?

(1) 999 900
(2) 999 000
(3) 990 000
(4) 900 000

11 $\frac{2}{5}$ of Jack's mass is the same as $\frac{1}{3}$ of Peter's mass. Express Jack's mass as a ratio of their total mass.

(1) 3 : 8
(2) 5 : 6
(3) 5 : 11
(4) 6 : 11

12 There are 18 apples and 12 mangoes in a basket. What fraction of the fruits are mangoes?

(1) $\frac{1}{3}$
(2) $\frac{2}{3}$
(3) $\frac{2}{5}$
(4) $\frac{3}{5}$

65

13 Tim spent $\frac{3}{5}$ of his pocket money and saved $\frac{1}{6}$ of the remainder. What fraction of the pocket money did he save?

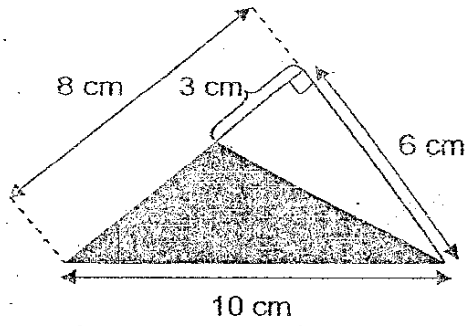
(1) $\frac{1}{5}$

(2) $\frac{1}{10}$

(3) $\frac{1}{15}$

(4) $\frac{7}{20}$

14 Find the area of the shaded triangle.
(The figure is not drawn to scale.)




(1) 15 $cm^2$
(2) 24 $cm^2$
(3) 25 $cm^2$
(4) 30 $cm^2$

15 The marks Meiling and Sufang scored in an English test are in the ratio 3 : 5. If Meiling has 16 marks less than Sufang, how many marks did Meiling score?

(1) 24
(2) 40
(3) 48
(4) 80

66

Name: _____ (  ) Class: Primary 5 (  )

Booklet B

Questions **16** 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. (10 marks)

---

**16** The value of the digit 8 in 487 653 is 8 x _____.

Ans : _____

---

**17** Write nine million, six hundred and five thousand and seventy-three in figures.

Ans: _____

---

**18** Evaluate 507 x 28.

Ans: _____

---

**19** How many hours is $\frac{5}{12}$ of a day?

Ans: _____h

---

**20** Divide and express the answer in its simplest form.

$$\frac{8}{10} \div 4$$

Ans: _____

---

21 What fraction of $2\frac{1}{2}$ years is 10 months?

Express your answer in its simplest form.

Ans: _____

---

22 There are 1000 men and women at a party. 300 of them are women. What is the ratio of the number of men to the number of women at the party?

Ans: _____

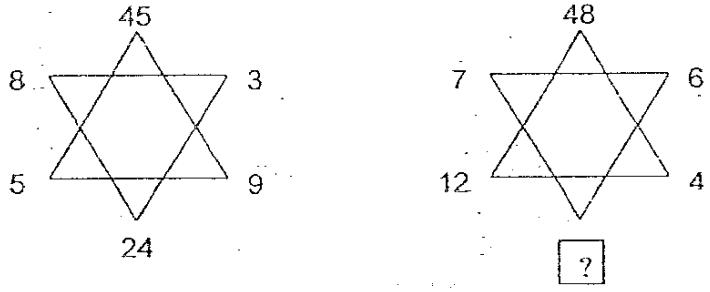
---

23 The ratio of the number of teachers to pupils at a kindergarten is 1 : 8. If there are 96 pupils, how many teachers are there?

Ans: _____

---

24 Study the number patterns below.




What is the missing number in the box?

Ans: _____

---

25 The product of two numbers is 7738. If the smaller number is 53, what is the bigger number?

Ans: 68

---



5

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** The sum of two numbers is 204. The difference between the two numbers is 18. Find the larger number.

Ans: _____

**27** 182 black and white circles are arranged in the following pattern.

How many white circles are there altogether?

Ans: _____

**28** Find the value of $85 + 10 \times (80 - 60) \div 4$.

Ans: _____

**29** Mr Lee bought some chairs. $\frac{2}{5}$ of them were red. The remaining 36 chairs were white. How many chairs did he buy altogether?

69

Ans: _____

30 Siti had $8\frac{1}{3}$ m of ribbon. She cut out 3 pieces of ribbons measuring $1\frac{1}{2}$ m each to make flowers. Find the length of the ribbon left.

Ans: _____ m

---

31 What is the missing fraction in the series below?

$\frac{1}{4}$ , $\boxed{\ ?\ }$ , $\frac{1}{2}$ , $\frac{5}{8}$ , $\frac{3}{4}$

Ans: _____

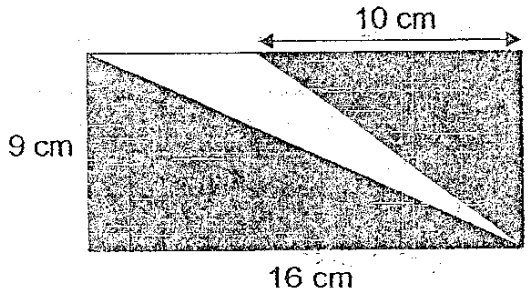
---

32 $\frac{4}{9}$ of a number is 32. What is $\frac{1}{6}$ of the number?

Ans: _____

---

33 Find the **unshaded** area of the rectangle below.
(The figure is not drawn to scale.)




Ans: _____ $cm^2$

---

8

34 A piece of wire of 140 cm long was cut into 2 pieces in the ratio 8 : 6. The shorter piece was bent to form a square. What is the length of the square?

Ans: _____ cm

---

35 The ratio of May's mass to Nina's mass is 4 : 3. If May's mass is decreased by 6 kg and Nina's mass is increased by 1 kg, May will have the same mass as Nina. What is Nina's original mass?

Ans: _____ kg

---

71

For questions 36 to 48, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [ ] at the end of each question or part-question. (50 marks)

36 Mary and her cousin had $400 altogether. After giving $15 to her cousin, Mary had as much money as her cousin. How much money did Mary's cousin have at first?

Ans: _____ [3]

37 Zach paid $210 for 84 markers. If the price of each marker decreased by $0.50, how many more markers could he buy with the money he had?

Ans: _____ [3]

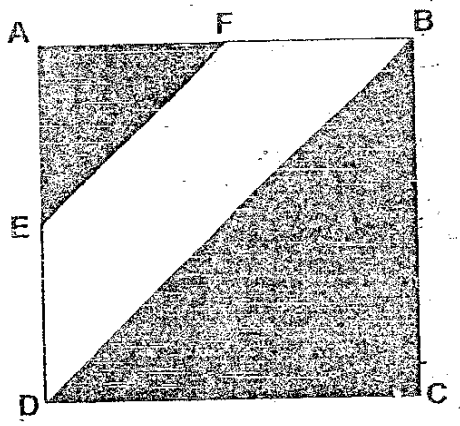
6

38 $\frac{3}{8}$ of the people at a concert were women and $\frac{3}{16}$ of them were children. If there were 420 men, how many women were there at the concert?

Ans: _____ [3]

---

39 The square ABCD of side 14 cm has the shaded area cut off.
E and F are the mid-points of the sides AB and AD respectively.
Find the area of the **unshaded** part of the square.
(The figure is not drawn to scale.)




Ans: _____ [3]

---

6

40 Ali had $189. He bought 6 DVD which cost him $18 each. Find the ratio of the amount Ali spent to the amount he had left.

Ans: _____ [3]

---

41 David saved $9 every day. After a number of days, he used all the money that he had saved to buy a few storybooks that cost $21 each.

(a) What was the least number of days that he needed to save in order to buy the storybooks?

(b) How many storybooks did he buy?

Ans: (a)_____ [2] 74

(b)_____ [1]

---

6

42 There were some markers in a box. $\frac{2}{5}$ of the markers were black and the rest were red. $\frac{5}{8}$ of the black and $\frac{2}{9}$ of the red markers were taken out from the box and there were 111 markers left in the box. How many markers were there in the box at first?

Ans: _____ [4]

---

43 David had some durians. He sold $\frac{2}{5}$ of them in the afternoon and $\frac{1}{2}$ of the remainder in the evening. There were 30 fewer durians sold in the evening than in the afternoon.

(a) How many durians did he sell in all?

(b) If he sold the durians at $5 each, how much money did he collect altogether?

Ans: (a) _____ [2]

75

(b) _____ [2]

---

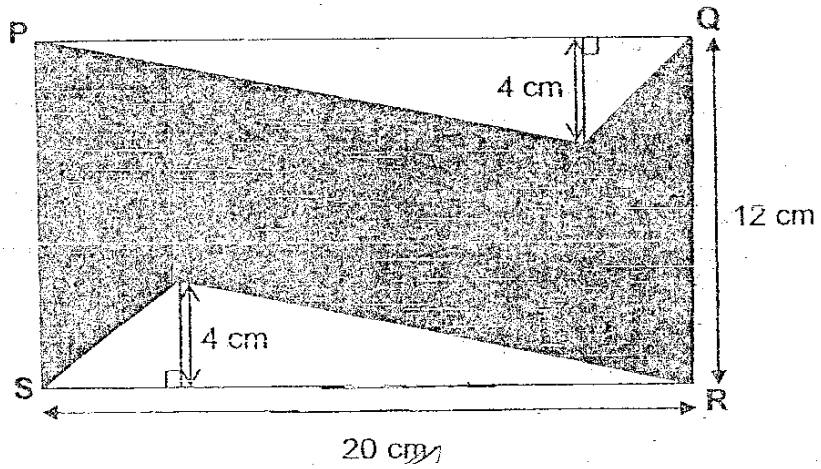


18

44 The figure below shows rectangle PQRS. (The figure is not drawn to scale.)

(a) Find the shaded area.

(b) What fraction of the rectangle is shaded?
(Express your answer in its simplest form.)




Ans: (a) _____ [3]

(b) _____ [1]

4

45 A group of people met at a party. Each person shook hands with everyone else. Mr Lee shook hands with 4 times as many men as women. Mrs Lee shook hands with 5 times as many men as women.
How many men and how many women were at the party?

Ans:_____men

77 _____women [5]

5

46 Wendy baked some muffins. She packed half the muffins equally into 6 tins and the other half equally into 8 boxes. There were 68 muffins in 2 tins and 3 boxes altogether. How many muffins did she bake?

Ans: _____ [5]

78

5

47 Alice read $\frac{1}{4}$ of a book on Thursday, $\frac{2}{9}$ of the remainder on Friday and 40 more pages on Saturday than on Friday. She read the last 110 pages on Sunday.

(a) How many pages were there in the book?

(b) What fraction of the book did she read on Saturday?
(Express your answer in its simplest form.)

Ans: (a) _____ [3]

79

(b) _____ [2]

48 Two families went to a restaurant for a buffet dinner last Sunday. The table shows the number of people who went for the dinner and the amount of money paid.

| | Tan Family | Koh Family |
|---|---|---|
| Number of adults | 3 | ? |
| Number of children | 3 | 1 |
| Total amount paid | $180 | $240 |

The amount each adult paid and the amount each child paid was in the ratio 3 : 1 for the buffet dinner.

(a) How much did each child pay?

(b) Find the number of adults in the Koh family who went for the buffet dinner.

Ans: (a) _____ [2]

(b) _____ [3]

80

End of Paper
— CHECK YOUR WORK CAREFULLY —

5

# Ai Tong Primary School

## Primary 5 Maths SA1 Exam (2007)

**Answer Keys**

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

16. **10000**

17. **9605073**

18. **14196**

19. **10h**

20. $\frac{1}{5}$

21. $\frac{1}{3}$

22. **7 : 3**

23. **12 teachers**

24. **42**

25. **146**

26. **111**

27. **46 white circles**

28. **135**

29. **60 chairs**

30. $\frac{3}{8}$

31. **12**

32. **12**

33. **27cm²**

34. **15cm**

35. **21kg**

36. $400 \div 2 = 200$
$200 - 15 = \$185$

37. $\$210 \div 84 = \$2.50$
$\$2.50 - \$0.50 = \$2.00$
$\$210 \div \$2 = 105$
$105 - 84 = 21$ more markers

38. $\frac{3}{8} + \frac{3}{16}$

$\frac{6}{16} + \frac{3}{16} = \frac{9}{16}$
$16 - 9 = 7$
$420 \div 7 = 60$
$60 \times 6 = 360$ women

39. $\frac{1}{2} \times 7 \times 7 = 24\frac{1}{2}\text{ cm}^2$

$\frac{1}{2} \times 14 \times 14 = 98\text{cm}^2$
$98 - 24\frac{1}{2} = 73\frac{1}{2}\text{ cm}^2$

40. 4 : 3

41a. 7 days
41b. $\$63 \div \$21 = 3$ storybooks

42. 180 markers

43a. 210 durians
43b. $1050

44a. $160\text{cm}^2$
44b. $\frac{2}{3}$

45. 25 men 6 women

46. 192 muffins

47a. 360 pages

47b. $\frac{5}{18}$

48a. $15

48b. 5 adults