AI TONG SCHOOL

2009
CONTINUAL ASSESSMENT 1
PRIMARY 6

MATHEMATICS
Paper 1
(Booklet A and B)

DURATION : 50 min

DATE   : 4 March 2009

INSTRUCTIONS
Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.
You are __not__ allowed to use a calculator.

Name : _____ (   )

Class : Primary 6 (_____)

Parent's Signature: _____

Date   : _____

Marks:

Paper 1		40
Paper 2		60
Total		100

Paper 1

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   In 7 486 099, the digit 8 stands for 8 × _____.

(1)   100

(2)   1000

(3)   10 000

(4)   100 000

2   Find the value of 9 × (2 + 16 ÷ 2) + 5.

(1)   86

(2)   95

(3)   126

(4)   135

3   Which of the following has the **smallest** value?

(1) $\dfrac{9}{11}$

(2) $\dfrac{3}{4}$

(3) $\dfrac{9}{13}$

(4) $\dfrac{3}{5}$

4   The number of red, blue and purple pens in a box are in the ratio of 6 : 7 : 5 respectively. If there are 60 blue and purple pens, how many red pens are there?

(1)   90
(2)   35
(3)   30
(4)   25

5   Which of the following is an equivalent of $\frac{1}{2}$%?

(1)   0.005
(2)   0.05
(3)   0.5
(4)   50

6   David had a ball of ribbon of length 20 m. He used 15.5 cm of it to tie a parcel. What is the length of ribbon he had left?

(1)   4.5 cm
(2)   184.5 cm
(3)   1845 cm
(4)   1984.5 cm

7   Ali had 40y sweets. He gave 12y sweets to each of his 2 friends and gave the remainder to 4 of his neighbours equally. How many sweets did each neighbour receive?

(1)   7y
(2)   6y
(3)   5y
(4)   4y

8   The figure below is not drawn to scale. AB is a straight line. Find ∠p.
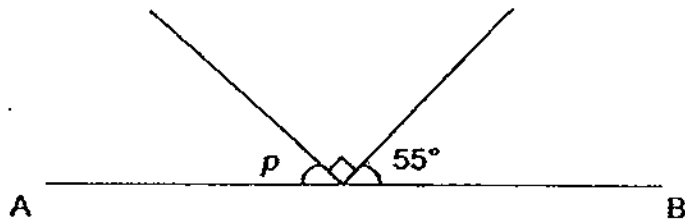
(1)   30°
(2)   35°
(3)   55°
(4)   60°

9   What is the last digit in the product of

11 × 12 × 13 × 14 ?

(1)   0
(2)   2
(3)   6
(4)   4

10   28 out of a class of 40 pupils are boys. What percentage of the class are girls?

(1)   30%
(2)   40%
(3)   70%
(4)   75%

1 Mrs Teo baked some cookies. She gave 30% of them to her neighbours and her daughter ate 50% of the remaining cookies. If she had 105 cookies left, how many cookies did she bake?

    (1)   90

    (2)   195

    (3)   210

    (4)   300

12 If $\triangle$ + $\heartsuit$ = 119

and $\triangle$ = $\heartsuit$ + $\heartsuit$ + $\heartsuit$ + $\heartsuit$ + $\heartsuit$ + $\heartsuit$

find the value of $\heartsuit$ + $\heartsuit$.

    (1)   204

    (2)   102

    (3)   34

    (4)   17

13 $\frac{2}{3}$ of Linda's money is equal to $\frac{1}{5}$ of Shermaine's. Express Linda's money as a ratio of the total amount of money both of them had.

    (1)   3 : 10

    (2)   3 : 13

    (3)   7 : 13

    (4)   10 : 13

14. There are 6 people in a room. There is one handshake between every two people. How many handshakes are there among these 6 people?

    (1)   12

    (2)   14

    (3)   15

    (4)   21

15. Chandra spent $12 on a storybook. He spent half of his remaining money on a toy. He was left with $5 after buying some sweets that cost $3.50. How much did he have at first?

    (1) $29.00

    (2) $22.00

    (3) $20.50

    (4) $17.00

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   Write *four hundred thousand, one hundred and eight* in numerals.

Ans: _____

17   The third multiple of a number is 69. What is the number?

Ans: _____

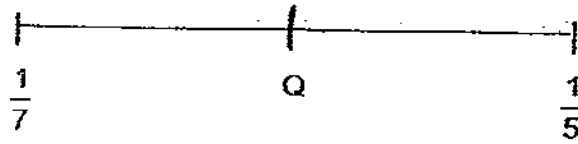18   Express $\dfrac{11}{25}$ as a percentage.

Ans: _____ %

19   If $p = 3$, find the value of $\dfrac{p+12}{p}$.

Ans: _____
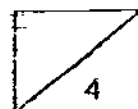
20

Express the value of Q in fraction in the simplest form.

Ans: _____

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21 How many $\dfrac{1}{7}$'s are there in $5\dfrac{4}{7}$?

Ans: _____

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22 What is $12\dfrac{1}{2}\%$ of 200?

Ans: _____

3
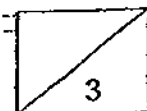
23 Squares of sides 3 cm each are cut out from a big rectangular cardboard measuring 15 cm by 11 cm. What is the maximum number of squares that can be cut out?
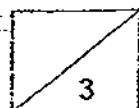
Ans: _____

24 In a club, there were 35 male and 15 female members. 10 more female members joined the club. Find the percentage increase of the club membership.

Ans: _____%

25 The ratio of the length of a rectangle to its width is 3 : 2. If the perimeter of the rectangle is 50 cm, find its width.

Ans: _____cm

8

3

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. **(10 marks)**

26 If Mr Low buys 3 similar tubs of ice-cream, he will have $12 left. If he buys 5 such tubs of ice-cream, he is short of $22. How much is 1 tub of ice-cream?
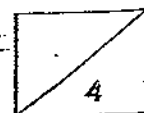
Ans: $_____

27 Mrs Goh baked 120 cookies. She gave 50% of the cookies to her neighbours, 10% of the remainder to her relatives and the rest to the orphanage. How many cookies did she give to the orphanage?

Ans: _____

4

28 Sean, David and Lishan shared a basket of rambutans in the ratio of 3 : 7 : 5. David had 32 more rambutans than Sean. How many rambutans are there in the basket?
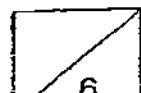
Ans: _____

29 Melvin has a piece of wire that is 40 cm long.

(a) What is the least number of times he needs to cut the wire to get 8 equal pieces?

(b) How long is each piece of wire?

Ans: (a)_____

(b)_____cm

30 Mr Low rented a van for five days. He paid $168 each day for the first three days and $123 for the rest of the days. Find his average rental payment per day.

Ans: $_____

AI TONG SCHOOL

2009

CONTINUAL ASSESSMENT 1

PRIMARY 6

MATHEMATICS
Paper 2

DURATION : 1 hour 40 min

DATE   : 4 March 2009

INSTRUCTIONS
Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.
You are allowed to use a calculator.

Name : _____ (   )

Class : Primary 6 (_____)
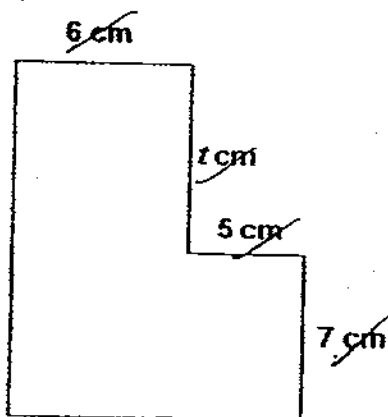
| Parent's Signature: _____ |
| Date   : _____ |

| Total | 60 |

Paper 2

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided.

For questions which require units, give your answers in the units stated. **(10 marks)**

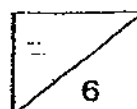**1**   Express the perimeter of the figure below in terms of t.

6 cm

t cm

5 cm

7 cm

Ans: _____ cm

---

2   Each skirt costs m and 3 blouses cost $62.50. Find the cost of 2 skirts and 6 blouses.

Ans: $ _____

---

3   The ratio of Paul's age to Sue's age is 4 : 3. In 8 years' time, the sum of their ages will be 86. What is Paul's age now?
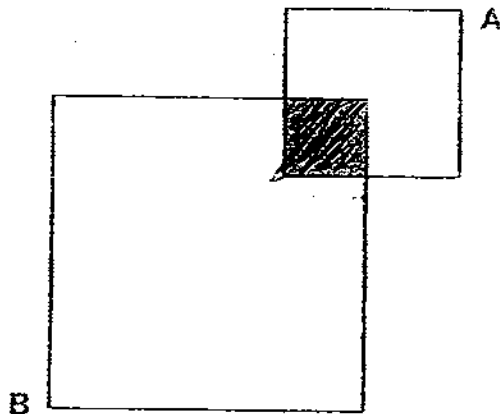
Ans: _____ yrs old

1

6

4   In a right-angled triangle, the two sides which form the right angle are 16 cm by
     12 cm respectively. How many such triangles are needed to form the smallest
     possible square?

16 cm

12 cm
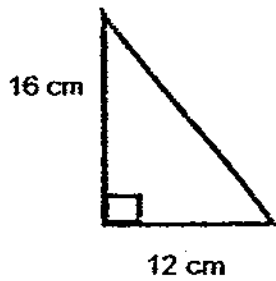
Ans: _____

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5   The figure below is made up of 2 squares, A and B. The ratio of Square A to
     Square B is 1 : 4. The shaded part is $\frac{1}{5}$ of Square A. What fraction of the whole
     figure is shaded?

A

B

Ans: _____

For questions 6 to 18, show your working clearly in the space provided for each question and write the answers in the spaces provided.
The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

(50 marks)

6   Zen had a piece of rectangular paper. He cut away $\frac{1}{9}$ of the ~~length~~ *breadth* and $\frac{2}{5}$ of the ~~breadth~~ *length*. Then, he measured the remaining piece of rectangular paper. He found the ~~length~~ *breadth* to be 16 cm and the ~~breadth~~ to be 15 cm. Find the area of the original piece of paper.   *length*

Ans: _____ [3]

7   The table below shows the rates for water consumption.

(a)   Find the amount paid for 50 m³ of water used.

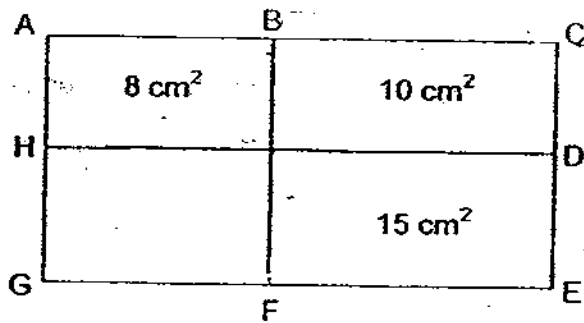(b)   If 7% GST is imposed on the total amount, how much is the GST correct to the nearest 10-cent?

| Water Consumption Rates	
First 20 m³	$1.33 per m³
Next 20 m³	$1.46 per m³
Additional amount above 40 m³	$1.73 per m³

Ans: (a)_____ [2]

(b)_____ [1]

6
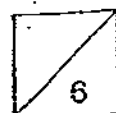
8 The rectangle ACEG is divided into 4 parts. BCEF is a square. Each part has a different area. Find the area X.
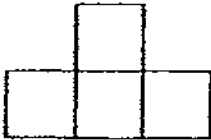
```
A            B                   C
 ┌───────────┬───────────────────┐
 │   8 cm²   │      10 cm²        │
H├───────────┼───────────────────┤D
 │           │                   │
 │           │      15 cm²       │
 └───────────┴───────────────────┘
G            F                   E
```

Ans:_____ [3]

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9 A snail fell into a well that is 300 cm deep.
In the first hour, it climbed 80 cm up the well.
In the second hour, it climbed 70 cm up the well.
Each hour, it managed to climb 10 cm less than the hour before.
How many hours did it take to climb out of the well?

Ans: _____[3]

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┌──────┐
│    ╱ │
│  ╱   │
│╱   6 │
└──────┘
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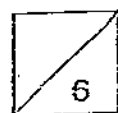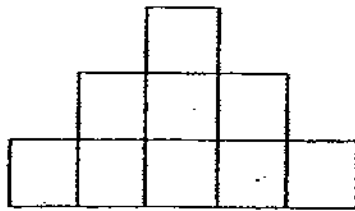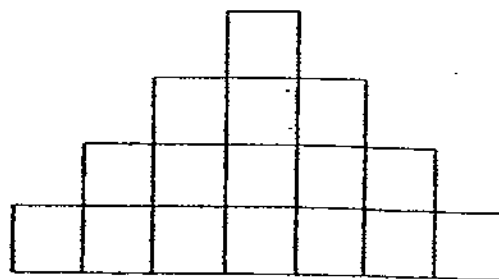
10   The diagrams below show tiling patterns. Each tile is a square of side 1 cm.

Pattern 1   Pattern 2   Pattern 3

Pattern Number	1	2	3	- - - - - - -	10
Number of squares	4	9	16	- - - - - - -	121
Perimeter (cm)	10	16	22	- - - - - - -	?

What is the perimeter of Pattern 10?

Ans: _____ [3]

11   James spends 20% of his monthly income on transport, 30% of it on food and 10% of the remainder on clothes. He saves the rest of his income. If his monthly savings is $900, find his monthly income.

Ans: _____ [3]

6
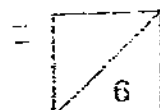
12 20 similar pails of water can fill $\frac{5}{12}$ of a container. Another 8 similar pails and 105 similar bowls of water are needed to fill the container to its brim. How many such bowls of water are needed to fill the empty container completely?

Ans: _____ [4]

13 The length of a rectangle is thrice as long as its width. Its perimeter is 16p cm.

(a) Find the length of the rectangle in terms of p.
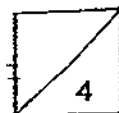
(b) Find the area of the rectangle if p = 4.

Ans : (a) _____ [2]

(b) _____ [2]

8
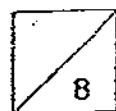
14   For every 200 books Johnson sells, he earns $8. He will receive an addition of $20 for every 3000 books sold. How many books must he sell to earn $700?

Ans:_____[4]

4

15   At a party, only $\frac{4}{9}$ of the invited guests came. The ratio of the number of women to the number of men present was 3 : 4. If 80 more men turned up for the party, the number of men would be twice the number of women. How many guests were invited?

Ans: _____[5]

5
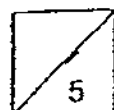
16   The number of pupils in Team A to the number of pupils in Team B is in the ratio
      7 : 6. If 45 pupils are transferred from Team A to Team B, the ratio will become
      2 : 3. How many pupils are there altogether?

Ans:_____ [5]

5
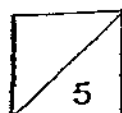
17   75% of the children in the stadium were girls. After 52 girls and 4 boys left, the remaining children formed groups of 8. In each group, there were 3 boys. How many children were there in the stadium at first?
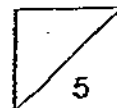
Ans: _____ [5]

5
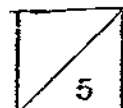
18 Ai Tong School organized a 2-day camp. On the first day, the number of boys was 600 more than the girls. On the second day, the number of boys decreased by 10% but the number of girls increased by 10%. If there were 2540 children on the second day, how many children were there on the first day?
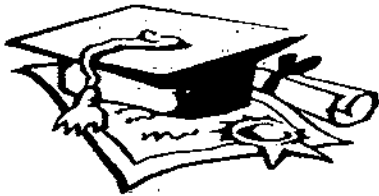
Ans:_____[5]

End of Paper

— CHECK YOUR WORK CAREFULLY —

5

ANSWER SHEET

EXAM PAPER 2009

SCHOOL   : AITONG PRIMARY SCHOOL
SUBJECT : PRIMARY 6 MATHEMATICS

TERM   : CA 1

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

16)400108   17)23   18)44%   19)5   20)6/35

21)39   22)25   23)15 squares   24)20%   25)10cm

26)$17   27)54 cookies   28)120 rambutans

29)a)1 times   b)5cm   30)125.40

Paper 2

1)1L→t+7
  1B→6+5=11
  Perimeter
  2L+2b
  (2t+36)
	2) 2xm=$2m
	  $62.50x2=$125
	  $125+$2m
	  Ans:$(125+2m)

3)8+8=16
  86-16=70
  70÷7=10
  10x4=40 (Paul)
	4)24

5)1/24	6) 8u→16(b) 1u→2 9u→18 3u→15L 1u→5 5u→25 25x18=450cm$_2$
7)a)$73.10 b)$5.10	8)15+10=25 5x5=25 15÷5=3cm(HG) 10÷5=2(AH) 8÷2=4(length of X) 3cm→breadth of X Area→3x4=12cm$_2$
9)80+70+60+50+40=300cm 1h+1h+1h+1h+1h+=5h	10)p4→28 p5→34 p6→40 p7→46 p8→52 p9→58 P10→46cm$_3$
11)T→20% ⎫ spent F→30% ⎭ R→50% Clothes→10/100x50% =50% Saving→100%-50%-5% =45% 45%-->900 1%-->20 100%-->$2000	12)5u→20 pails 1u→4 pails 5u→105 bowls 1u→21 bowls 12u→21x12=252 bowls
13)a)6p cm b)192cm$_2$	14)3000÷200=15 sets 15x$8=$120 $120+$20=$140(3000bk) $700÷$140=5 5x$3000=15000 books

15) 2 parts→80
    1 parts→40
    7 parts→40x7=280
    4u→280
    1u→70
    9u→70x9=630 guests
	16) A : B A : B
	    7 : 6$_{x5}$ 2 : 3$_{x13}$
	  35 : 30 26 : 39
	    $\underbrace{}_{65}$ $\underbrace{}_{65}$
	
	  35-26=9u
	  9u→45
	  1u→5
	  65u→325 pupils

17) 136 children	**18)** 90%+110%+540=2540
	  200%-->2540-540=2000
	  2000+600=2600 children