

### AI TONG SCHOOL

# 2013 CONTINUAL ASSESSMENT 1 PRIMARY 6

## MATHEMATICS Paper 1 (Booklets A and B)

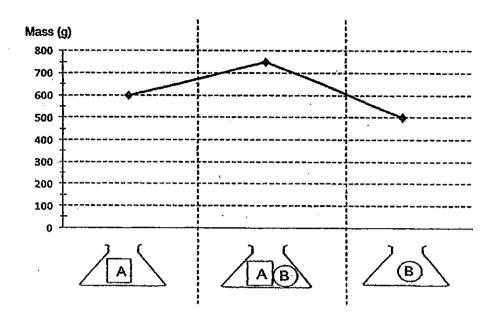
| DATE                            | :          | 5 March 2013                                 |
|---------------------------------|------------|--|
| Follow all ins<br>Answer all qu | tru<br>tru | booklet until you are told to do so. ctions. |

50 min

**DURATION:** 

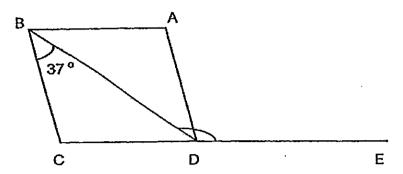
| Name :                         | · · · · · · · · · · · · · · · · · · · | _ ( | ) |         |   |
|--------------------------------|---------------------------------------|-----|---|---------|---|
| Class: Primary 6 (             | )/6M(                                 | )   |   | Paper 1 | 4 |
|                                |                                       |     |   | Paper 2 | 6 |
| Parent's Signature :<br>Date : |                                       |     |   | Total   | 1 |

Use the line graph below to answer questions 4 and 5. The line graph shows the mass of 3 similar containers with different object(s) placed in each of them.



- What is the total mass of object A and object B with the container?
  - (1) 600 g
  - (2) 750 g
  - (3) 800 g
  - (4) 1100 g
- 5 What is the mass of the container when it is empty?
  - (1) 150 g
  - (2) 250 g
  - (3) 350 g
  - (4) 450 g

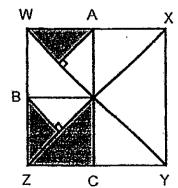
The figure below is not drawn to scale. ABCD is a rhombus. Given that CDE is a straight line, find  $\angle$  BDE.



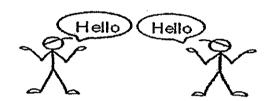
- (1) 116°
- (2) 127°
- (3) 133°
- (4) 143°
- 7 The price of an apartment when rounded off to the nearest \$1000 was \$431 000. Which of the following is a possible actual price of the apartment?
  - (1) \$430 456
  - (2) \$430 634
  - (3) \$431 546
  - (4) \$431 913
- The figure below shows a square, WXYZ. A, B and C are the mid-points of lines WX, WZ and YZ respectively. What percentage of the figure is shaded?



- (2)  $33\frac{1}{3}\%$
- (3)  $66\frac{2}{3}$  %
- (4) 75%

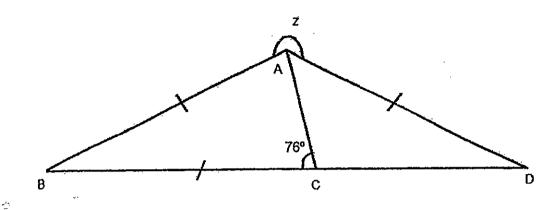


- Amir has as many \$2 notes as \$5 notes in his piggy bank. Given that the total amount of money in his piggy bank is \$140, how many \$5 notes does he have in his piggy bank?
  - (1) 14
  - (2) 20
  - (3) 35
  - (4) 40
- 10 8 people met at a party and they said "Hello" to each other once. How many times was the word "Hello" being said?



- (1) 28
- (2) 36
- (3) 56
- (4) 72
- 11 Find the value of 7 a + 12 + 6a when a = 6.
  - (1) 41.0
  - (2) 42.5
  - (3) 77.0
  - (4) 79.5
- The total score of 5 pupils in a Mathematics test is 431. Two pupils scored 82 marks each. What is the average score of the remaining 3 pupils?
  - (1) 86
  - (2) 89
  - (3) 164
  - (4) 267

13 The figure below is not drawn to scale. Given that AB = BC = AD, find  $\angle z$ .



- (1) 198°
- (2) 208°
- (3) 234°
- (4) 236°

The number of male workers in a factory was 45% of the number of female workers. After 72 female workers resigned, the ratio of the number of female workers to the number of male workers became 4:3. How many more female workers than male workers were there at first?

- (1) 81
- (2) 99
- (3) 108
- (4) 180

Billar weighs (2w + 5)kg heavier than Allan. Billar weighs 3 kg less than Collin. If Allan weighs 59 kg, what is Collin's weight in terms of w?

- (1) (51 + 2w) kg
- (2) (54 + 2w) kg
- (3) (64 + 2w) kg
- (4) (67 + 2w) kg

### **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 If  $\frac{3}{7}$  of a number is 105 what is the number?

Ans:

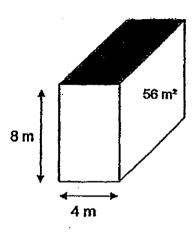
17 Find the value of 521 - 29.7.

Ans:\_\_\_\_

Write  $8\frac{5}{9}$  as a decimal correct to 1 decimal place.

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

The area of one of the faces of the cuboid below is 56 m². Find the area of the shaded face of the cuboid.



Ans:\_\_\_\_\_\_m²

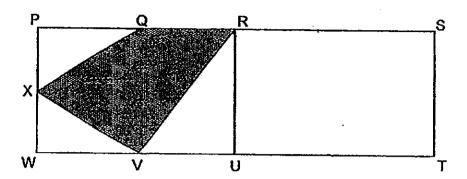
20 (9 + 4r) kg = \_\_\_\_\_g

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

21 2 years ago, Wen Li's age was 12 years 8 months. What is her age in 9 months' time?

Ans: \_\_\_\_\_ years \_\_\_\_ months

Rectangles PRUW and RSTU are identical. Points Q, V and X are mid points of PR, UW and PW respectively. What fraction of the figure PSTW is shaded?



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

A machine can print 85 copies of magazines in 20 minutes. How many copies of magazines can the machine print in 1 hour?

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

Express  $\frac{4}{5}$ % as a fraction in the simplest form.

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

25 Simplify 10p + 16 - 18p + 2 - 2.

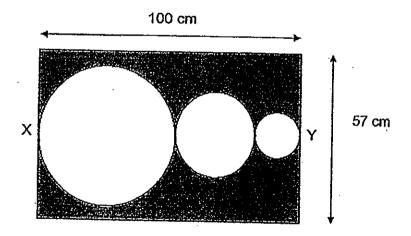
Ans: \_\_\_\_\_



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)

A packet of jelly beans cost \$ 12. Guo Ming bought 8 packets of jelly beans and 12 boxes of chocolates. He could also buy 18 boxes of chocolates with the same amount of money. How much did each box of chocolates cost?

27 The figure below is not drawn to scale. It is made up of 3 different circles and a rectangle. Line XY cuts the centre of all 3 circles. Find the perimeter of the shaded part. ( $\pi = 3.14$ ).



| Ans: |  | cm |
|------|--|----|
|------|--|----|

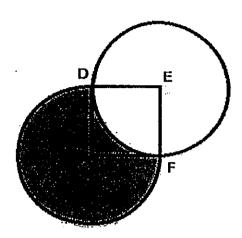
Tim took  $\frac{1}{5}$  hour to run one round around a circular track. How many complete rounds can be run in  $\frac{5}{6}$  hour?

Ans:

29 Ribbon A and Ribbon B were of the same length at first. After cutting 9.4 m from Ribbon A and 6.7 m from Ribbon B, the length of Ribbon B was 1.5 times that of Ribbon A. Find the original length of each ribbon.

30 The figure below is made up of 2 identical circles with centres C and E and a square CDEF. The diameter of the circle is 28 cm.

Find the area of the shaded part.  $(\pi = \frac{22}{7})$ 



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



END OF PAPER CHECK YOUR WORK CAREFULLY!



### AI TONG SCHOOL

# 2013 CONTINUAL ASSESSMENT 1 PRIMARY 6

## MATHEMATICS Paper 2

| DURATION: 1 h 40 min   |          |
|--|----------|
| DATE : 5 March 2013  | ·        |
| INSTRUCTIONS  Do not open the booklet until you a Follow all instructions.  Answer all questions.  You are allowed to use a calculator |          |
| Name :   | ( )      |
| Class : Primary 6 ( ) / 6M (   | )        |
| Parent's Signature :  Date :   | Total 60 |

| pro\ | estions 1 to 5 carry 2 marks each. Show your working clearly in the space vided for each question and write your answers in the spaces provided. questions which require units, give your answers in the units stated.  (10 marks) | Do not write<br>in this space |
|------|--|-------------------------------|
| 1    | The length of Pole A is $\frac{5}{7}$ the length of Pole B. After 36 cm was cut off  |                               |
|      | from each pole, the length of Pole A is $\frac{2}{3}$ of Pole B. What is the original length of Pole B?  |                               |
|      |  |                               |
|      |  |                               |
|      | Ans:cm [2]   |                               |
| 2    | The figure, not drawn to scale, shows 4 different triangles Find the sum of $\angle c$ , $\angle d$ , $\angle e$ , $\angle f$ , $\angle g$ and $\angle h$ .  |                               |
| e e  | f g  |                               |
| 4    | c d  |                               |
|      | Δne · · · · · · · · · · · · · · · · · · ·  |                               |

3 The table below shows the rate of renting a rod at Fernvale Prawning Park.

Do not write In this space

| First Hour                                       | \$19.50 |
|--|---------|
| Every additional $\frac{1}{2}$ h or part thereof | \$6     |

Ah Teck rented a rod from 10.45 a.m. to 2 p.m. How much did he pay for the rental of the rod?

| -    |           |
|------|-----------|
| Ans: | \$<br>[2] |

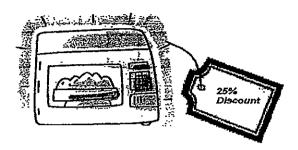
| 4 | Suying and Sumei baked some cupcakes each. If Suying gave away $\frac{2}{5}$ of her cupcakes and Sumei ate $\frac{1}{7}$ of hers, both of them will have the same number of cupcakes left. What fraction of the total cupcakes did Sumei bake? | Do not write in this space |
|---|--|----------------------------|
|   | Ans:[2]  |                            |
| 5 | Caleb and Derek shared a sum of money. When Caleb's share decreased from \$1605 to \$900, the amount Derek received increased by 15%. How much did Derek receive at the end?   |                            |
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|   | ÷.   |                            |
|   | Ans: \$[2]   |                            |

| que:<br>avai | questions 6 to 18, show your working clearly in the space provided for each stion and write the answers in the spaces provided. The number of marks lable is shown in the brackets [ ] at the end of each question or question.  (50 marks) | Do not write in this space.   |
|--------------|---|---|
| 6            | 24 mugs and 15 bowls cost \$386.10. If each mug cost half as much as each bowl, find the cost of 36 mugs.   |   |
|              |   |   |
|              |   |   |
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|              | Ans:[3]   |   |
| 7            | The figure, not drawn to scale, is made up of 2 squares. Find $\angle f$ .  | Top you are the second of the |
|              | 38°   |   |
|              |   |   |
|              | Ans:[3]   |   |

| 8 | Grace used some matchsticks to make the patterns below.  (a) How many matchsticks were used in Pattern 4?  (b) If Grace used 131 matchsticks, which Pattern did she create? |           |             |     |
|---|---|-----------|-------------|-----|
|   | Pottorn 4   | Detter 2  |             |     |
|   | Pattern 1   | Pattern 2 | Pattern 3   |     |
|   | •   | ,         |             |     |
|   |   |           |             |     |
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|   |   |           |             |     |
|   |   |           |             |     |
|   |   |           | Ans: (a)    | [1] |
|   |   |           | (b) Pattern | [2] |
|   | <del></del>   |           |             |     |

A microwave oven, inclusive of 7% GST, costs \$214. If the store is having a storewide discount of 25%, how much does Adam have to pay for the microwave oven, including GST, after discount?

Do not write in this space

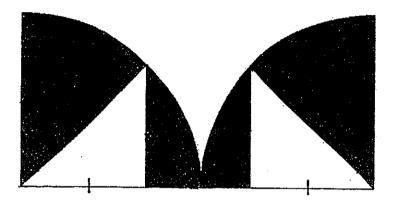


Ans: \_\_\_\_\_[4]

| 10 | Draw an isosceles triangle RST in which $\angle RST = 66^{\circ}$ and RS = RT. Label the triangle clearly Measure and write down the length of RS | Do not write in this space |
|----|---|----------------------------|
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|    | Ans:[1]   |                            |

The figure below, which is not drawn to scale, is made up of 2 identical quadrants and 2 identical isosceles triangles. The radius of the quadrant is 20 cm. Find the total area of the shaded parts of the figure Round off your answer to 2 decimal places.

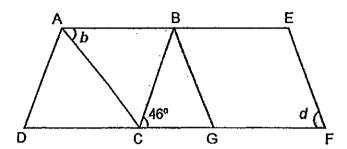
Do not write in this space



Ans: [4]

12 In the figure below, not drawn to scale. ABCD and BEFG are identical rhombuses. ABE and DCGF are straight lines. Find the sum of ∠b and ∠d.

Do not write in this space

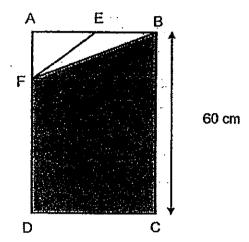


Ans:\_\_\_\_[4]

13 In the figure below, the area of triangle BEF is 90 cm² and AE=BE
The ratio of the length of AF and FD is 1:3.

Do not write in this space

- a) Find the area of the shaded part.
- b) Find the perimeter of rectangle ABCD.



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

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

| 14       | A fruiterer had the same number of apples. pears and lemons at first.  After 98 lemons, some apples and pears were sold, there were 297 fruits left. There were twince as many apples as pears left. The number of lemons left was 13 fewer than the number of apples left. How many pears were sold? | Do not write in this space |
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| <u> </u> | Ans:[4]   |                            |

| 15 | Anna and Ben take 9 days to complete a jigsaw puzzle. Ben and Celine take 3 days to complete the same jigsaw puzzle. When Celine partners Dennis, they take 4 days to complete the jigsaw puzzle. How many days will Anna and Dennis take to complete 2 such jigsaw puzzles? | Do not write in<br>this space |
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|    | Ans:[4]  |                               |

In a car park, there are thrice as many cars as vans. The number of cars in twice the number of motorcycles. The total number of wheels these Do not write in 16 this space vehicles have is 4598. (a) How many cars are parked at the car park? (b) If  $\frac{1}{3}$  of the motorcycles left the car park, how many vehicles are left in the carpark? [3] Ans: (a)

[2]

Every month, Andy spent  $\frac{1}{5}$  of his income on food and  $\frac{2}{3}$  of the remaining money on rental. After spending his income on food and rental, he gave  $\frac{1}{2}$  of remaining money to his parents and had \$250 left. How much did he spend on food and rental every month?

Do not write in this space

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

| 18 | On Teachers' Day, a florist sold thrice as many roses as orchids and collected \$703 in total. She collected \$437 more for the roses than the orchids. Given that a stalk of rose cost \$1.50 more than a stalk of orchid, find the cost of a stalk of orchid. | Do not write in this space |
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|    |   |                            |
|    | Ans:[5]   |                            |

END OF PAPER CHECK YOUR WORK CAREFULLY!



# ANSWER SHEET

**EXAM PAPER 2013** 

SCHOOL: AITONG

**SUBJECT: PRIMARY 6 MATHEMATICS** 

TERM : CA1

| Q | )1_ | Q2 | Q3  | Q4 | Q5 | Q6 | Q7 | Q8 | 09 | 010 | 011 | 012 | 013 | 014 | 015 |
|---|-----|----|-----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|   | 1   | 3  | . 3 | 2  | 3  | 4  | 2  | 1  | 2  | 3   | 2   | 2   | 4   | 2   | 4   |

16)245

17)491.3

18)8.6

19)28m<sub>2</sub>

20)(9000+4000r)

21)15 years 5 months

22) 1/4

23)255

24)1/125

25)(1P+14)

26)\$16

27)628cm

28)4

29)14.8m

30)504cm<sub>2</sub>

#### Paper 2

1)1unit $\rightarrow$ 36cm 7units $\rightarrow$ 36cm  $\times$  7 = 252cm

2)180° × 4 = 720° 720° - (180° × 2) = 360°

3)10.45 a.m to 2p.m. is 3h 15 min  $$19.50 + (5 \times $6) = $49.50$ 

4)5 x 2 = 10 10 + 7 = 17 7÷17 = 7/17

```
5)$1605 - $900 = $705
   15% → $705
   115\% \rightarrow $705 \times 115/15 = $5405
6)15 \times 2 = 30
    24 + 30 = 54
    36 \rightarrow 54 \times 2/3
    \Rightarrow$386.10 x 2/3 = $257.40
7)180° -(90° + 38°) = 52°
    180^{\circ} - 52^{\circ} = 128^{\circ}
    180^{\circ} - 128^{\circ} = 52^{\circ}
    180^{\circ} - (52^{\circ} + 54^{\circ}) = 83^{\circ}
8)a)4 \times 2 = 8
     4 + (3 \times 3) = 13
     13 + 8 = 21
  b)131 - 6 = 125
     125 \div 5 = 25
     25 + 1 = 26
9)$214 \times 100/107 = $200
  $200 - 25\% = $150
  $150 \times 107/100 = $160.50
10)6cm
11) Area of an isosceles triangle = \frac{1}{2} \times 10 \times 20 = 100 \text{cm}^2
    Area of half a circle = (\prod x \cdot 20 \times 20)
                                         2
   = 628
  Area of shaded area = 628 - (100 \times 2)
=428.30 (to 2dp)
12)180^{\circ} - (46^{\circ} \times 2) = 88^{\circ}
    180^{\circ} - 88^{\circ} = 92^{\circ}
    92^{\circ} \div 2 = 46^{\circ}
    180^{\circ} - 46^{\circ} = 134^{\circ}
    134^{\circ} \div 2 = 67^{\circ}
```

 $67^{\circ} + 46^{\circ} = 113^{\circ}$ 

```
13)a)60÷4 = 15cm

90cm<sub>2</sub> x 2 = 180cm<sub>2</sub>

180cm<sub>2</sub>÷15cm = 12cm

½ x 24cm x 15cm = 180cm<sub>2</sub>

45cm x 24cm = 1080cm<sub>2</sub>

1080cm<sub>2</sub> + 180cm<sub>2</sub> = 1260cm<sub>2</sub>

b)(60cm x 2) + (24cm x 2) = 168cm
```

#### 15)72 day

18)\$3.50

