

Name : \_\_\_\_\_ (     )

Class : Primary 5 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 5 Mathematics

2012 Semestral Assessment Two

Paper 1

Booklet A

22 October 2012

**15 QUESTIONS  
20 MARKS**

**TOTAL TIME FOR BOOKLETS A AND B: 50 MINUTES**

### **INSTRUCTIONS TO CANDIDATES**

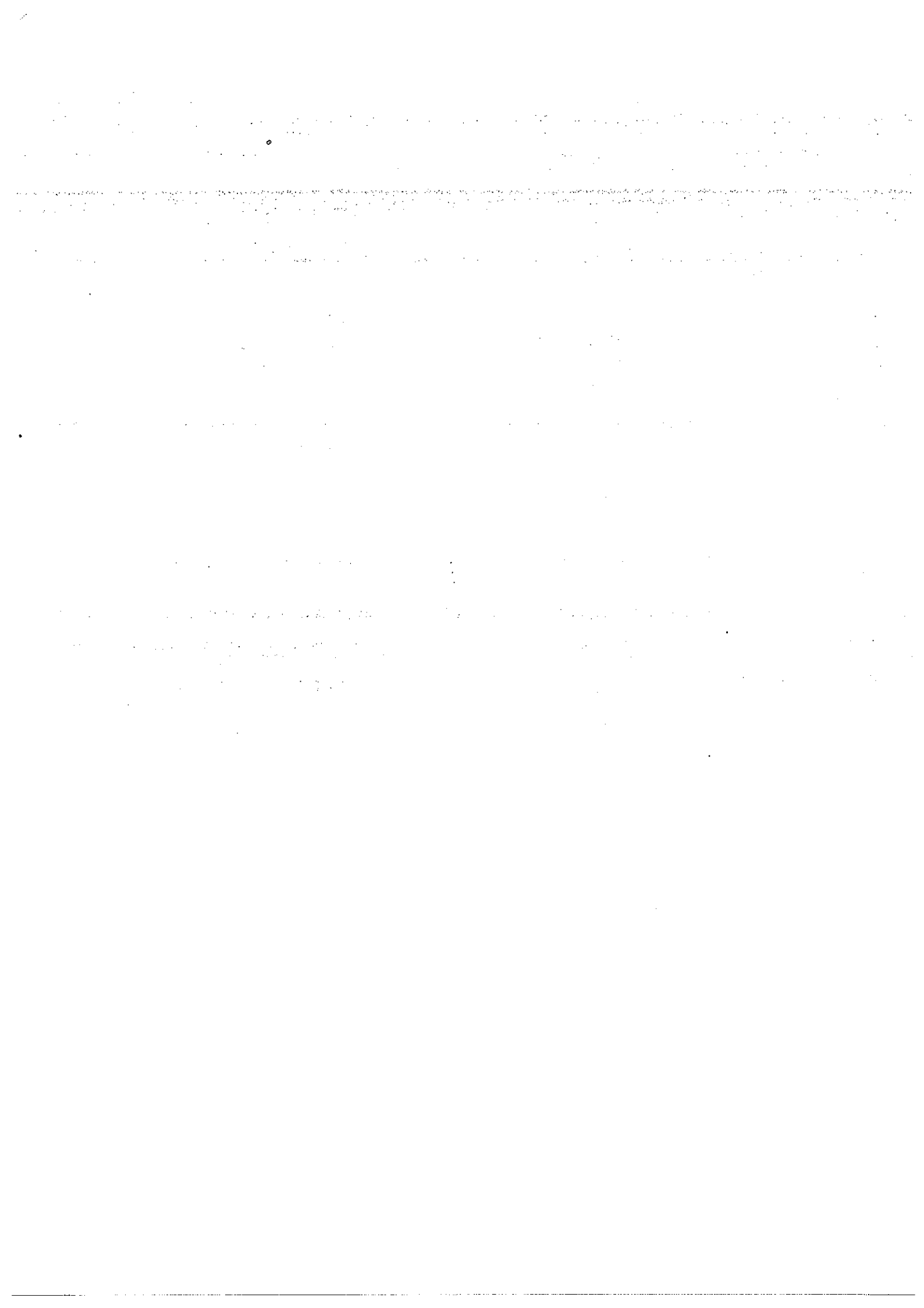
Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

The use of calculators is NOT allowed.

***This booklet consists of 7 printed pages including the cover page.***



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 (1, 2, 3, 4) on the  
Optical Answer Sheet (OAS). [20 marks]

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1) What must be added to 14 ten thousands to make 1 million?

(1) 400 000

(2) 860 000

(3) 986 000

(4) 998 600

2) If  $18 \times 307 = 5\,526$ , find  $18 \times 0.307$ .

(1) 5.526

(2) 55.26

(3) 552.6

(4) 55 260

3) Express  $\frac{255}{500}$  as a percentage.

(1) 0.51 %

(2) 51 %

(3)  $\frac{51}{100}$  %

(4)  $5\frac{1}{10}$  %

- 4) What is the missing number in the box?

$$6\frac{5}{9} = \frac{\boxed{?}}{18}$$

(1) 10

(2) 59

(3) 60

(4) 118

- 5)  $3\frac{5}{8}$  m is equivalent to \_\_\_\_ cm.

(1) 3.625

(2) 62.5

(3) 362.5

(4) 625

- 6) Mrs Baskin sold an average number of 52 cones of ice cream from Monday to Thursday. She sold a total of 194 cones of ice cream from Friday to Saturday. What was the average number of cones of ice cream sold from Monday to Saturday?

(1) 41

(2) 67

(3) 110

(4) 149

- 7) Pororo had  $\frac{7}{8}\ell$  of fruit punch. He poured  $\frac{1}{9}$  of it into a tumbler. How much fruit punch did he have left?

(1)  $\frac{7}{9}\ell$

(2)  $\frac{47}{72}\ell$

(3)  $\frac{55}{72}\ell$

(4)  $\frac{8}{81}\ell$

- 8) The ratio of Mickey's mass to Minnie's mass is 3 : 2. The difference in their masses is 19 kg. What is their total mass?

(1) 38 kg

(2) 57 kg

(3) 95 kg

(4) 190 kg

- 9)  $643\,000 \div 7\,000$  is the same as \_\_\_\_\_.

(1)  $643\,000 \div 70 \div 10\,000$

(2)  $643\,000 \div 7 \div 10\,000$

(3)  $643\,000 \div 70 \div 1\,000$

(4)  $643\,000 \div 7 \div 1\,000$

- 10) A group of 12 boys and 15 girls shared some pizzas. Each child ate 3 slices of pizza and there were 4 slices of pizza left. Which one of the following number sentences shows the total number of pizza slices at first?

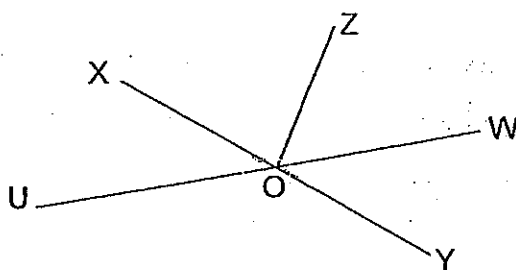
(1)  $(12 \times 15) \times 3 - 4$

(2)  $(12 + 15) \times 3 + 4$

(3)  $(12 \times 3) + (15 \times 4)$

(4)  $(12 + 15) \times (3+4)$

- 11) The figure below, not drawn to scale, is made up of 3 straight lines, UW, XY and OZ. Which one of the following statements is true?



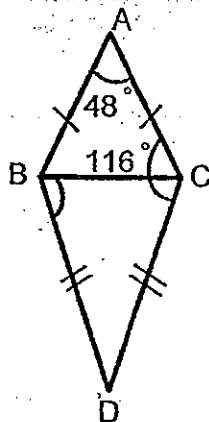
(1)  $\angle WOY = \angle XOU$

(2)  $\angle ZOY = \angle UOX$

(3)  $\angle UOY + \angle XOZ = 180^\circ$

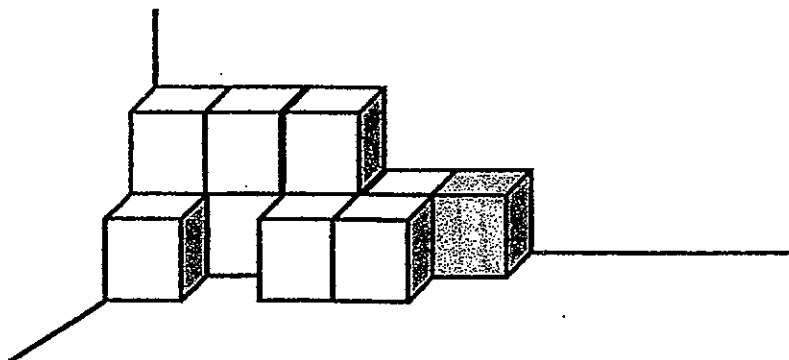
(4)  $\angle XOZ + \angle ZOW = 180^\circ$

- 12) The figure below shows two isosceles triangles, ABC and BCD. Find  $\angle CBD$ .



- (1)  $48^\circ$                       (2)  $50^\circ$   
 (3)  $58^\circ$                       (4)  $64^\circ$

- 13) The solid figure below is made up of identical 3-cm cubes. What is the volume of the solid figure?



- (1)  $33 \text{ cm}^3$                       (2)  $99 \text{ cm}^3$   
 (3)  $243 \text{ cm}^3$                       (4)  $297 \text{ cm}^3$

- 14) Mrs Potter had some money. She spent 36% of it on her bills and spent  $\frac{5}{8}$  of the remainder on shopping. Then she saved the rest. What fraction of the money did Mrs Potter save?

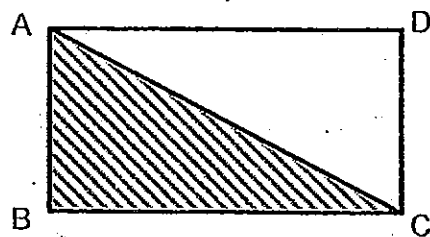
(1)  $\frac{2}{5}$

(2)  $\frac{6}{25}$

(3)  $\frac{9}{40}$

(4)  $\frac{27}{200}$

- 15) ABCD is a rectangle. The ratio of its length to its breadth is 3 : 2. If its perimeter is 90 cm, what is the area of triangle ABC?



(1) 243 cm<sup>2</sup>

(2) 486 cm<sup>2</sup>

(3) 972 cm<sup>2</sup>

(4) 1 944 cm<sup>2</sup>

End of Booklet A



Name : \_\_\_\_\_ ( )

Class : Primary 5 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 5 Mathematics

2012 Semestral Assessment Two

Paper 1

Booklet B

22 October 2012

15 QUESTIONS  
20 MARKS

TOTAL TIME FOR BOOKLETS A AND B: 50 MINUTES

### INSTRUCTIONS TO CANDIDATES

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

YOU ARE NOT ALLOWED TO USE A CALCULATOR.

*This booklet consists of 9 printed pages including the cover page.*

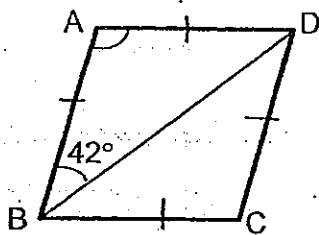
Questions 16 to 25 carry 1 mark each. Write down your answers in the spaces provided. For questions which require units, give your answers in the units stated. [10 marks]

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16) Write 29.7 % as a decimal.

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

17) In the figure below, ABCD is a rhombus. Find  $\angle BAD$ .



Ans : \_\_\_\_\_°



- 18) The table below shows the number of books borrowed from the school library for 5 days. What is the average number of books borrowed from Wednesday to Friday?

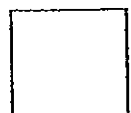
Monday	36
Tuesday	43
Wednesday	64
Thursday	79
Friday	100

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write in  
this space.

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

- 19) Shane has thrice as many marbles as Keith. Keith has  $\frac{3}{4}$  of what Nick has. What is the ratio of Nick's marbles to Shane's marbles to Keith's marbles?

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



- 20) Cleo made 8.24 l of lime juice. She poured  $\frac{5}{8}$  of it into some bottles. How much lime juice did she have left? Give your answer in ml.

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

- 21) At a baking class, 14 pupils shared  $5\frac{3}{5}$  kg of flour equally to bake cupcakes. How much flour did each pupil get?

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



22) Mr Sam is 0.36 m taller than Mrs Sam. Their baby girl, Tessa, is  $\frac{1}{2}$  of Mrs

Sam's height. If their total height is 401 cm, what is Tessa's height?

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this space.

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

23) Priya had a big pumpkin. She used  $\frac{1}{6}$  of it to make pies and  $\frac{2}{3}$  of the remainder to cook porridge. What fraction of the pumpkin did she have left?

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

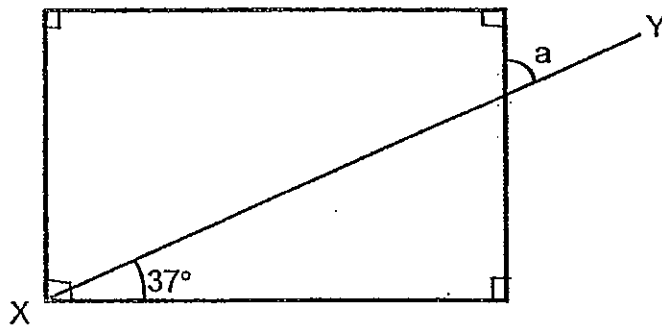


- 24) Mrs Toogol had some plates. She packed half of them equally into 42 boxes. There were 14 plates in each box. If she broke  $\frac{1}{6}$  of the remaining plates, how many plates did she have left?

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

- 25) The figure, not drawn to scale, shows a rectangle and a straight line XY. Find  $\angle a$ .



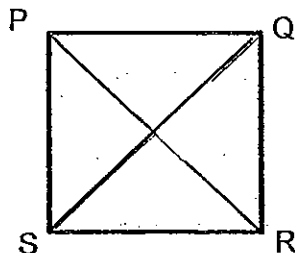
Ans : \_\_\_\_\_



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. [10 marks]

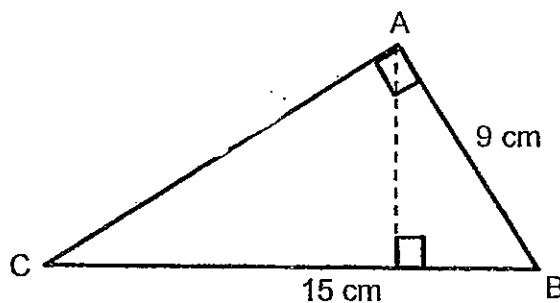
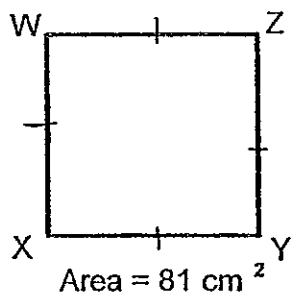
Do not write in this space.

- 26) PQRS is a square and PR = 16 cm. Find the area of PQRS.



Ans : \_\_\_\_\_ cm<sup>2</sup>

- 27) Square WXYZ has the same perimeter as triangle ABC. What is the area of triangle ABC?



Ans : \_\_\_\_\_ cm<sup>2</sup>

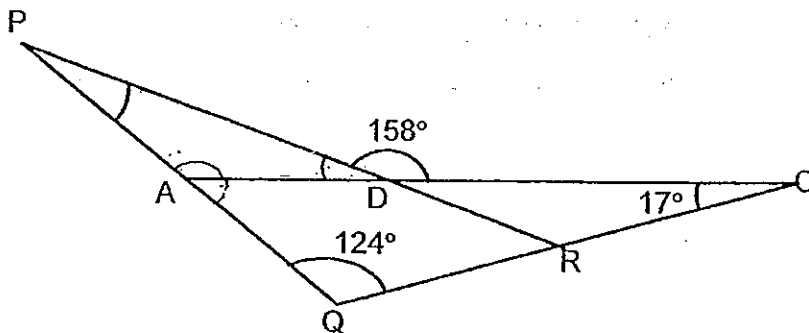


- 28) Mr Woo's salary is \$4 000. He gives 30% of it to his parents, spends \$900 on food and saves the rest. What percentage of his salary does he save?

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

- 29) In the figure below, PDR and ADC are straight lines. Find  $\angle APR$ .



Ans : \_\_\_\_\_ °





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- 30) The average mass of 12 girls is 40 kg. The total mass of 5 of the girls is 235 kg. What is the average mass of the remaining girls?

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

End of Paper 1



Name: \_\_\_\_\_ ( )

Class : Primary 5 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



### Primary 5 Mathematics

### 2012 Semestral Assessment Two

### Paper 2

22 October 2012

\_\_\_\_\_  
Parent's/Guardian's Signature

Paper 1	40
Paper 2	60
Total Mark	100

**18 QUESTIONS**

**60 MARKS**

**TOTAL TIME FOR PAPER 2: 1 HOUR 40 MINUTES**

### INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

The use of an approved calculator is expected, where appropriate.

*This booklet consists of 15 printed pages including the cover page.*

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. [10 marks]

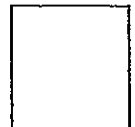
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- 1) Uncle Tomee had 43kg 348 g of pork. He sold 4.218 kg of the pork to Mrs Tay. Then he cut the remaining pork into 13 equal portions. What was the mass of each portion of pork? Express your answer in kilograms.

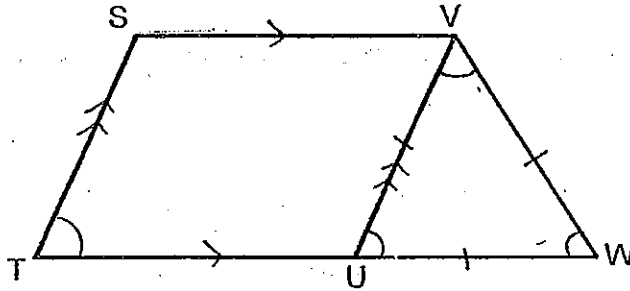
Ans : \_\_\_\_\_ kg

- 2) The usual price of a bicycle was \$510. Nadia bought it at a discount of 15 %. How much did she pay for the bicycle?

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



- 3) In the figure below, STUV is a parallelogram. UVW is an equilateral triangle. Find  $\angle STU$ .



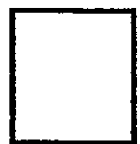
Ans : \_\_\_\_\_°

- 4) The table below shows Marvin's scores for his Mathematics tests. If his average score is 87.5, how much did he get for Test 2?

Test	1	2	3	4
Score	79	?	84	92

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

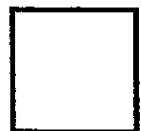
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5)  $\frac{2}{3}$  of Charlie's mass is 52 kg. What is  $\frac{1}{4}$  of his mass?

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



For questions °6 to 18, show your working clearly 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.

[50 marks]

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- 6) Loopy saves 24% of her salary every month. She saves \$27 025.92 in a year. What is Loopy's monthly salary?

Ans: \_\_\_\_\_ (3 m)

- 7) The table below shows the rental charges of Ohaiyo Chalet.

Monday – Thursday	\$98 per day
Friday – Sunday	\$123 per day
Extra charge on Public Holidays	\$56 per day

Jasmine rented Ohaiyo Chalet from Wednesday to Saturday. Thursday was a public holiday. How much rental charge did Jasmine pay in total?

Ans: \_\_\_\_\_ (3 m)



8) Wesley bought a car. He paid a deposit of \$3 500 and the rest of it in instalments. Each monthly instalment was \$1 113. After paying for 60 months, he still had to pay another \$104 020. How much did the car cost?

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Ans: \_\_\_\_\_ (3 m)

9) 2 families had buffet lunch at Universe Restaurant. One of the families with 3 adults and 4 children paid \$215.70. The other family with 5 adults and 4 children paid \$290.70. How much did 1 adult have to pay?

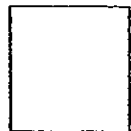
Ans: \_\_\_\_\_ (3 m)



- 10) In a company, the ratio of the number of female employees to the number of male employees was 5 : 3. After 556 men left the company, the ratio of the number of women to the number of men became 3 : 1. How many employees were there at first?

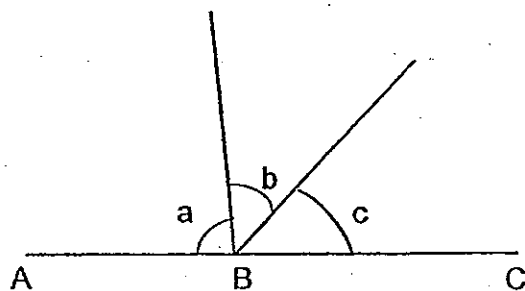
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Ans: \_\_\_\_\_ (3 m)





- 11) ° In the figure, not drawn to scale, ABC is a straight line. The ratio of  $\angle a$  to  $\angle b$  is 9 : 5. The ratio of  $\angle a$  to  $\angle c$  is 3 : 2. Find all the unknown angles,  $\angle a$ ,  $\angle b$  and  $\angle c$ .



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Ans:  $\angle a$  : \_\_\_\_\_

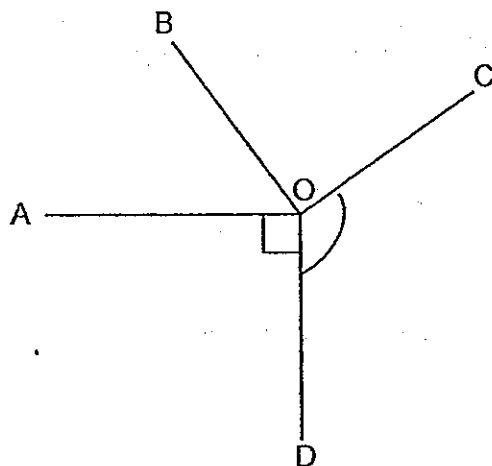
$\angle b$  : \_\_\_\_\_

$\angle c$  : \_\_\_\_\_ (4m)



- 12) The following figure is made up of 4 straight lines, AO, BO, CO and DO. Given that  $\angle BOC$  is  $\frac{5}{6}$  of  $\angle COD$  and  $\angle AOD$  is 1.25 times of  $\angle AOB$ . Find  $\angle COD$ .

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Ans: \_\_\_\_\_(4m)



- 13) Britney is now  $\frac{6}{13}$  as old as Christina. Christina was 69 years old nine years ago. How long will it take Britney to be  $\frac{1}{2}$  of Christina's age?

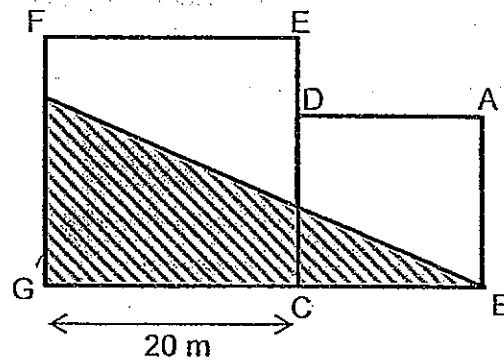
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Ans: \_\_\_\_\_ (4 m)



- 14) The figure is made up of 2 squares, ABCD and CEFG. The area of ABCD is  $196 \text{ m}^2$ . The length of FH and AB are in the ratio of 4 : 7. What is the area of triangle BGH?

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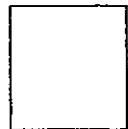
Ans: \_\_\_\_\_ (4m)



- 15) The average mass of 3 printers and 4 toasters is 768 g. The average mass of 8 hairdryers and 1 toaster is  $261\frac{1}{3}$  g. If the total mass of the 4 hairdryers is 840 g, find the total mass of 1 toaster and 1 printer.

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Ans: \_\_\_\_\_ (5m)

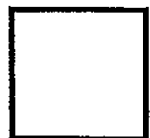


16) Jaymee jogged a distance from her house to her grandparents' house.

She jogged  $\frac{1}{3}$  of it before taking a break. Then she continued to jog  $\frac{1}{4}$  of the remaining distance and another 255 m. After that, Jaymee jogged  $\frac{1}{2}$  of the remaining distance and another 364 m. At last, Jaymee had 798 m left. What was the distance from her house to her grandparents' house?

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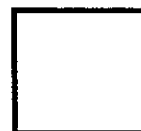
Ans: \_\_\_\_\_ (5m)



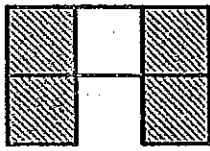
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- 17) Darian had 80 IQ questions to solve in a competition. For every correct answer that he got, Darian would earn 35 points. For every incorrect answer, Darian would get 40 points deducted. After answering all the questions, Darian scored a total of 2,125 points. How many incorrect answers did Darian get?

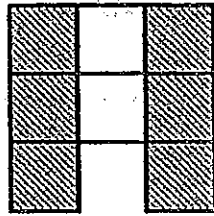
Ans: \_\_\_\_\_ (4m)  
(5m)



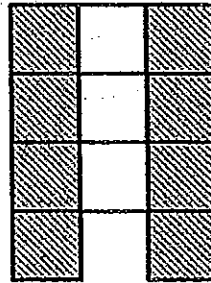
18) Alison designed a pattern using grey tiles and white tiles.



Pattern 1



Pattern 2



Pattern 3

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(a) Complete the table below.

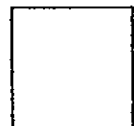
Pattern	Number of grey tiles	Number of white tiles	Total number of tiles
1	4	1	5
2	6	2	8
3	8	3	11
⋮	⋮	⋮	⋮
25	(a) _____ (1m)	25	77

(b) What is the total number of tiles in Pattern 120?

(c) How many grey tiles will there be if the figure had 737 tiles?

Ans: (b) \_\_\_\_\_ (2m)

(c) \_\_\_\_\_ (2m)



End of Paper



# Answer Ke

## EXAM PAPER 2012

SCHOOL : CHIJ

SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

16) 0.297

17)  $180^\circ - 42^\circ - 42^\circ = 96^\circ$

18)  $100 + 79 + 64 = 243$

$243 \div 3 = 81$

19) S : K      K : N

3 : 1      3 : 4

N : S : K

4 : 9 : 3

20)  $8.24\text{L} \rightarrow 8240\text{ml}$

$1 - 5/8 = 3/8$

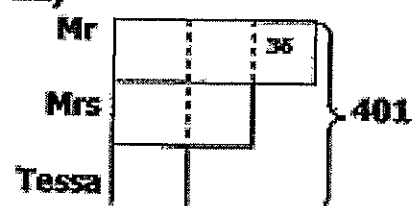
$3/8 \times 8240 = 3090\text{ml}$

21)  $53/5 = 28/5$

$28/5 \div 14 = 28/5 \times 1/14 = 2/5$

$= 0.4 = 0.4\text{kg} = 400\text{g}$

22)



$$0.36\text{m} \rightarrow 36\text{cm}$$

$$401 - 36 = 365$$

$$365 \div 5 = 73\text{cm}$$

$$23) 1/3 \times 5/6 = 5/18$$

$$24) 14 \times 42 = 588$$

$$5/6 \times 588 = 490$$

$$25) 180^\circ - 90^\circ - 37^\circ = 53^\circ$$

$$26) 1/2 \times 16 \times 8 = 64$$

$$64 \times 2 = 128\text{cm}^2$$

$$27) 9 \times 4 = 36$$

$$36 - 15 - 9 = 12$$

$$1/2 \times 12 \times 9 = 54\text{cm}^2$$

$$28) 30/100 \times 4000 = 1200$$

$$4000 - 1200 - 900 = 1900$$

$$1900/4000 \times 100\% = 47.5\%$$

$$29) 180^\circ - 124^\circ - 17^\circ = 39^\circ$$

$$360^\circ - 158^\circ - 158^\circ = 44^\circ$$

$$44^\circ \div 2 = 22^\circ$$

$$180^\circ - 39^\circ = 141^\circ$$

$$180^\circ - 141^\circ - 22^\circ = 17^\circ$$

$$30) 40 \times 12 = 480$$

$$480 - 235 = 245$$

$$12 - 5 = 7$$

$$245 \div 7 = 35$$

## Paper 2

1)  $43\text{kg} - 348\text{g} \rightarrow 43.348\text{kg}$

$$(43.348 - 4.218) \div 13 = 3.01$$

The mass of each portion of pork is 3.01kg

2)  $100\% - 15\% = 85\%$

$$85/100 \times 510 = \$433.5$$

She paid \$433.5 for the bicycle

3)  $180^\circ - 60^\circ = 120^\circ$

$$180^\circ - 120^\circ = 60^\circ$$

$\angle\text{STU}$  is  $60^\circ$

4)  $87.5 \times 4 = 350$

$$350 - 79 - 84 - 92 = 95$$

He got a score of 95 for test 2.

5)  $(52 \div 2) \times 3 = 78$

$$78 \times \frac{1}{4} = 19.5\text{kg}$$

$\frac{1}{4}$  of his mass is 19.5kg

6)  $\$27025.92 \div 12 = \$2252.16$

$$24\% \rightarrow 2252.16$$

$$100\% \rightarrow (2252.16 \div 24) \times 100 = 9384$$

Loopy's monthly salary is \$9384

7)  $98 + 56 = 154$

$$154 + 98 + 123 + 123 = \$498$$

Jasmine paid \$498 in total

8)  $60 \times 1113 = 66780$

$$66780 + 3500 + 104020 = \$174300$$

The car cost \$174300

9)  $3a + 4c = \$215.70$

$$5a + 4c \rightarrow \$290.70$$

$$2a \rightarrow \$290.70 - \$215.70 = \$75$$

$$1a \rightarrow \$75 \div 2 = \$37.50$$

1 adult had to pay \$37.50

$$10) F : M \quad F : M$$

$$5 : 3 \quad 3 : 1$$

$$= 15 : 9 \quad = 15 : 5$$

$$9u - 5u = 4u \rightarrow 556$$

$$1u \rightarrow 556 \div 4 = 139$$

$$15u + 9u = 24u$$

$$139 \times 24 = 3336$$

There were 3336 employees at first

$$11) \angle a : \angle b \quad \angle a : \angle c$$

$$9 : 5 \quad 3 : 2$$

$$= 9 : 6$$

$$9u + 5u + 6u = 20u \rightarrow 180^\circ$$

$$1u \rightarrow 180^\circ \div 20^\circ = 9^\circ$$

$$\angle a \rightarrow 9^\circ \times 9 = 81^\circ$$

$$\angle b \rightarrow 9^\circ \times 5 = 45^\circ$$

$$\angle c \rightarrow 9^\circ \times 6 = 54^\circ$$

$\angle a$  is  $81^\circ$ ,  $\angle b$  is  $45^\circ$ ,  $\angle c$  is  $54^\circ$

$$12) 5u \rightarrow 90^\circ$$

$$6u \rightarrow (90^\circ \div 5) \times 6 = 108^\circ$$

$$\angle COD \text{ is } 108^\circ$$

$$13) C \rightarrow 69 + 9 = 78$$

$$B \rightarrow (78 \div 13) \times 6 = 36$$

$$78 - 36 = 42$$

$$42 - 36 = 6$$

It will take 6 years

$$14) 14 \times 14 = 196$$

$$7u \rightarrow 14$$

$$4u \rightarrow 14/7 \times 4 = 8$$

$$20 - 8 = 12$$

$$20 + 14 = 34$$

$$\frac{1}{2} \times 12 \times 34 = 204m^2$$

The area of triangle BGH is  $204m^2$

15)  $4h \rightarrow 840$

$1h \rightarrow 840 \div 4 = 210$

$8h \rightarrow 210 \times 8 = 1680$

$2352 - 1680 = 671 \rightarrow 1t$

$5376 - (672 \times 4) = 2688$

$2688 \div 3 = 896 \rightarrow 1p$

$896 + 672 = 1568$

The total mass of 1 toaster and 1 printer is 1568g.

16)  $(798 + 364) \times 2 = 2324$

$(2324 + 255) \div 3 = 859\frac{2}{3}$

$(859\frac{2}{3} \times 4) \div 2 = 1719\frac{1}{3}$

$1719\frac{1}{3} \times 3 = 5158m$

The distance from the house to her grandparents' house is 5158m

17)  $35 + 40 = 75$

$80 \times 35 = 2800$

$2800 - 2125 = 675$

$675 \div 75 = 9$

Darian got 9 incorrect answers.

18)a)  $77 - 25 = 52$

b)  $(120 \times 2) + 2 = 242$

$242 + 120 = 362$

The total number of tiles in pattern 120 is 362.

c)  $(737 - 2) \div 3 = 245$

$(245 \times 2) + 2 = 492$

There will be 492 grey tiles.

