CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2015 Semestral Assessment One

Paper 1

Booklet A

12 May 2015

15 questions
20 marks

TOTAL TIME FOR BOOKLETS A & B : 50 MINUTES

<u>INSTRUCTIONS TO CANDIDATES</u>
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 <u>8</u> 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.

(20 marks)

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1. What is the value of the digit 7 in 8 475 913?

    1) 70

    2) 700

    3) 7000

    4) 70 000

2. Find the value of $86 + 42 - 10 \div 2$.

    1) 34

    2) 52

    3) 73

    4) 83

3. Which of the following has the same value as $3\frac{4}{8}$?

    1) 3.05

    2) 3.4

    3) 3.48

    4) 3.5

4. There were 15 red marbles and 10 blue marbles. What is the ratio of the number of red marbles to the total number of marbles?

   1) $3:2$

   2) $2:3$

   3) $3:5$

   4) $2:5$

5. A container has a capacity of 5 ℓ. It contains $3\frac{1}{7}$ ℓ of water. How much more water can be poured into the container to fill it up completely?

   1) $1\frac{1}{7}$ ℓ

   2) $1\frac{6}{7}$ ℓ

   3) $2\frac{1}{7}$ ℓ

   4) $2\frac{6}{7}$ ℓ

6. Four cakes were shared equally among 3 children. What fraction of the cakes did each child get?
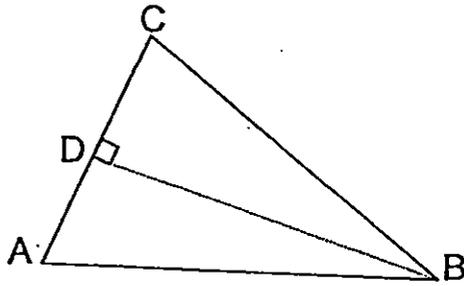
   1) $1\frac{3}{4}$

   2) $1\frac{1}{3}$

   3) $\frac{3}{4}$

   4) $\frac{1}{3}$

7. The figure below shows a triangle ABC. The Base of the triangle is AC. Identify the height of triangle ABC.

1) AB

2) AD

3) BD

4) CD

8. Amelia, Betty and Clara bought a present for their father. Amelia paid $\frac{1}{4}$ of the price of the present and Betty paid $\frac{2}{3}$ of the price of the present. Clara paid for the rest. What fraction of the price of the present did Clara pay?

1) $\frac{1}{12}$

2) $\frac{1}{4}$

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

4) $\frac{11}{12}$

9. Find the product of $\frac{3}{10}$ and $\frac{8}{9}$.

1) $2\frac{26}{27}$

2) $1\frac{17}{90}$

3) $\frac{27}{80}$

4) $\frac{4}{15}$

10. Kei Ming ate $\frac{1}{5}$ of a pizza in the morning. He ate $\frac{5}{8}$ of the remainder in the afternoon. What fraction of the pizza did he eat in the afternoon?

1) $\frac{3}{10}$

2) $\frac{3}{8}$

3) $\frac{1}{2}$

4) $\frac{7}{10}$

5

11. Study the pattern below.

1st

Which shape is in the 38th position?

1)

2)

3)

4)

12. There were 13 children in Sunshine Kindergarten. Mrs Koh bought 105 sweets. She gave each child 6 sweets. The remaining sweets were then distributed equally to 3 teachers. How many sweets did each teacher receive?

1) 9

2) 27

3) 44

4) 78

13. Between the numbers 12 and 50, how many times does the digit 4 appear altogether?

1) 14

2) 13

3) 12

4) 11

14. Mrs Tan gave $180 to her children, Darlene and Etta, in the ratio 2 : 7. How much did Darlene receive?

1) $20

2) $40

3) $90

4) $140

15. The perimeter of a rectangular painting is $2\frac{1}{2}$ m. Its length is 1 m. Find its breadth.

1) $\frac{1}{4}$ m

2) $\frac{1}{2}$ m

3) $\frac{3}{4}$ m

4) $1\frac{1}{2}$ m

End of Booklet A

Name: _____ (   )

Class: Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2015 Semestral Assessment One

Paper 1

Booklet B

12 May 2015

15 questions
20 marks

TOTAL TIME FOR BOOKLETS A & B : 50 MINUTES

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)

Do not write in this space

16. Write thirty-one thousand, seven hundred and nineteen in figures.

Ans : _____

17. What is the value of $10 \div 7$? Round off your answer to 2 decimal places.

Ans : _____

18. Fill in the missing number in the box.

$$2 : 1 = 10 : \boxed{}$$

Ans : _____

2

19. Round off the number 39 513 to the nearest thousand.

Ans : _____

20. What is the value of 62 000 ÷ 40∅?

Ans : _____

21. The ratio of the number of blue balloons to the number of orange balloons was 3 : 4. There were 24 blue balloons. How many balloons were there altogether?

Ans : _____

3

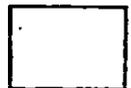22. Alex ran $\frac{4}{5}$ km. Wei Ling ran $\frac{5}{6}$ of the distance Alex ran.

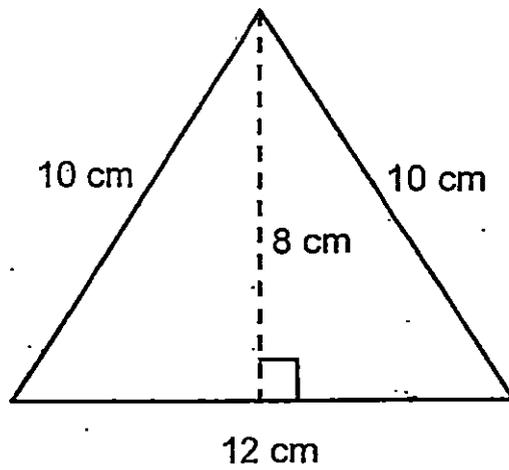What was the distance that Wei Ling ran? Express your answer as a fraction in its simplest form.

Ans : _____ km

23. Kelvin bought a rope measuring $\frac{7}{8}$ m. He cut it into 5 equal pieces. What is the length of each piece of rope? Leave your answer in metres.

Ans : _____ . m

24. The triangle below is not drawn to scale. Find the area of the triangle.

```
        10 cm    8 cm   10 cm
              12 cm
```

Ans : _____ cm^2

25. $\dfrac{1}{2}$ of a number is 20.

What is $\dfrac{2}{5}$ of the same number?

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. The sum of 2 numbers, A and B, is 200. A is 60.
     What is the ratio of the number A to the number B?
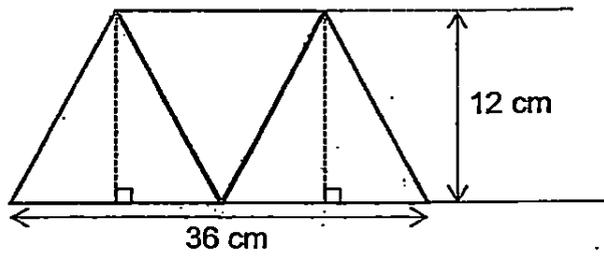   Express the ratio in its simplest form.

Ans : _____

27. Mrs Wang bought between 40 and 50 chicken wings. The number of chicken wings could be shared among 6 pupils equally. It could also be shared among 4 pupils equally. How many chicken wings did Mrs Wang buy?
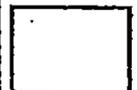
Ans : _____
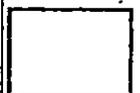
28. The figure below is made up of 3 triangles of the same size. What is the area of the figure?
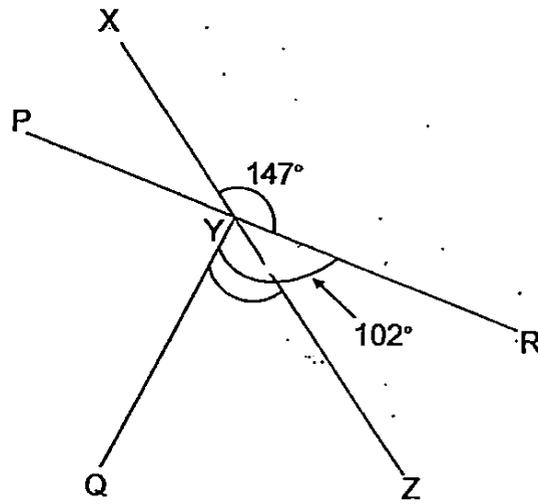

12 cm

36 cm

Ans : _____ cm²

29. A bookshop sells a pen for $2. For every two pens bought, a pen is given free. Joseph wants to buy 13 pens. What is the least amount of money he has to pay altogether?
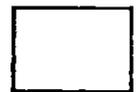
Ans :$ _____

I. The figure below is not drawn to scale. XYZ and PYR are straight lines. $\angle XYR = 147°$ and $\angle QYR = 102°$. Find $\angle QYZ$.

Ans : _____°

END OF PAPER 1

Name: _____ ( )

Class: Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2015 Semestral Assessment One

Paper 2

12 May 2015

Paper 1	40
Paper 2	60
Total Marks	100

TOTAL TIME FOR PAPER 2 : 1 HOUR 40 MINUTES

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This booklet consists of 17 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)

Do not write in this space

1. Mr Lee earned \$4557 a month. He spent $\frac{5}{7}$ of his salary and saved the rest. How much did he save?

Ans: _____

2. Lionel is 3 years old. His father is 28 years older than he is. In how many years' time would Lionel's father be thrice his age?

Ans : _____

2

3. The length of a rectangle is 308 cm. The length is thrice of its breadth. What is the breadth of the rectangle? Express your answer as a mixed number.
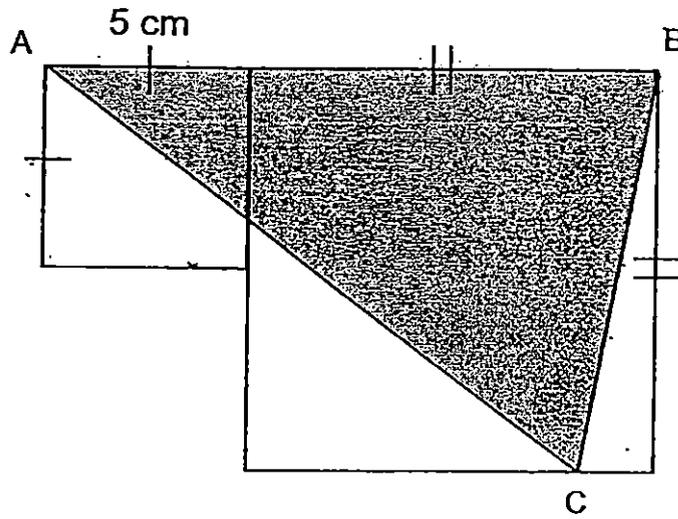
Ans : _____ cm

4. 6 ℓ of water can fill $\frac{1}{3}$ of a fish tank. After some water is poured into the fish tank, it becomes $\frac{7}{9}$ full. How much water is in the fish tank now?
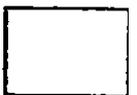
Ans : _____ ℓ

5. The figure below, not drawn to scale, consists of two squares. The length of the smaller square is 5 cm. The length of the bigger square is twice the length of the smaller square. Find the area of the shaded triangle ABC.

5 cm

A   B

                    C

Ans : _____ cm²

4

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)

6.   Alex and Benedict had $260. Alex and Caleb had $340. Caleb had 6 times as much money as Benedict. How much money did Alex have?
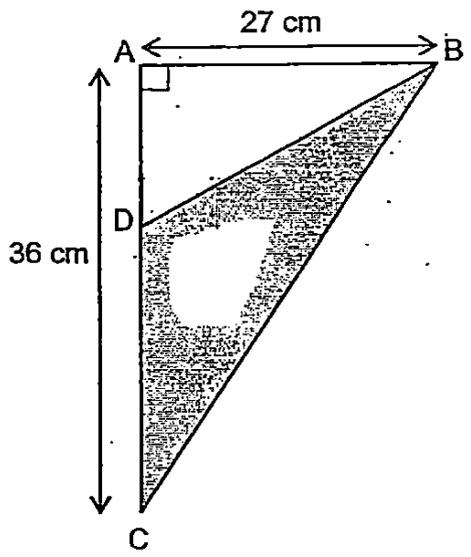
Ans : _____ (3 m)

7. The cost of 17 similar belts and 11 similar watches is $ 1 909. A watch costs the same as 6 such belts. What is the cost of each belt?

Ans : _____ (3 m)

8. In the figure below, not drawn to scale, the area of triangle CDB is twice the area of triangle ABD. What is the area of triangle CDB?

27 cm

A B

36 cm

D

C

Ans : _____ (3 m)

7

9. Vincent prepared 10 417 balloons for a sports event. The number of red balloons was four times the number of blue balloons. The number of blue balloons was twice the number of green balloons. How many red balloons were there?

Ans : _____ (3 m)

10. Mrs Moh gave some tarts to 10 children. Each girl received 2 tarts while each boy received 3 tarts. Mrs Moh gave 5 more tarts to the girls than to the boys. How many girls did Mrs Moh give the tarts to?

Ans : _____ (3 m)

11. Almaz spent $\frac{5}{9}$ of her salary on a television. She spent $\frac{3}{7}$ of the remainder on a table. She had $580 left. How much did the television cost?

Ans : _____ (4 m)

12. At a concert, the ratio of the number of adults to the number of children was 6 : 5. There were 57 more adults than children. After some time, 26 adults and 48 children left the concert. How many people remained behind?

Ans : _____ (4 m)

13. Ginny baked 116 cookies. Mabel baked 176 cookies. After each of them gave away an equal number of cookies, Mabel had 7 times as many cookies as Ginny. How many cookies did Ginny give away?
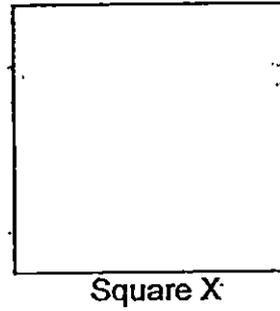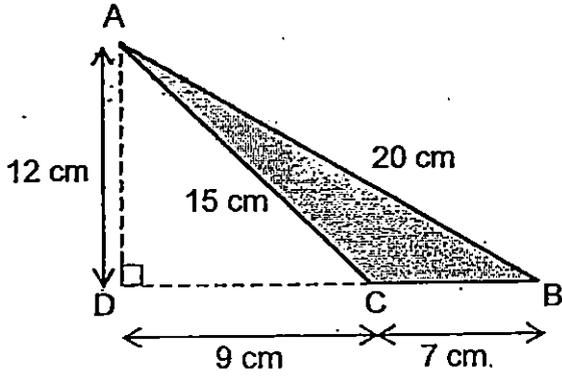
Ans : _____ (4 m)

14. Mr Hong bought some pencils. He gave 29 pencils to Class 1A and 34 pencils to Class 1B . He gave $\frac{2}{5}$ of the remaining pencils to Class 2E. Then he had $\frac{1}{4}$ of the pencils left. How many pencils did he buy?

Ans :_____ (4 m)

15. The figures below, not drawn to scale, show a triangle ABC and a square X. The area of square X is 22 cm² more than the area of triangle ABC. Find the perimeter of square X.

12 cm

20 cm

15 cm

A

D   C   B

9 cm   7 cm.

Square X

Ans : _____ (4 m)

14

16. There were 20 160 people performing for the National Day Parade. The ratio of the number of adults to the number of children was 9 : 7. There were 160 more boys than girls. How many boys were there?

Ans : _____ (5 m)

15

17. At a school sports carnival, $\frac{1}{3}$ of the pupils were from Red House. $\frac{1}{4}$ of the pupils were from Blue House. $\frac{1}{3}$ of the remaining pupils were from Green House. The rest were from Yellow House. There were 170 pupils from Yellow House. How many more pupils were from Blue House than from Green House?

Ans : _____ (5 m)

16

18. Jonathan used syrup and water to make a drink. He mixed the syrup and water in the ratio 2 : 5. He used $\frac{1}{8}$ ℓ of syrup to make the drink.

(a) How many litres of drink did Jonathan make?

(b) After making the drink, Jonathan drank $\frac{1}{10}$ ℓ of the drink. Then he poured the rest equally into 3 cups. How much drink was there in each cup? Give your answer in litres.

Ans : (a) _____ (2 m)

(b) _____ (3 m)

End of Paper

EXAM PAPER 2015
LEVEL : PRIMARY 5
SCHOOL : CHIJ ST NICHOLAS GIRLS SCHOOL
SUBJECT : MATHEMATICS
TERM : SA1

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
4	3	4	3	2	2	3	1	4	3
Q 11	Q 12	Q 13	Q 14	Q 15					
2	1	1	2	1					

Q16. 31 719   Q17. 1.43 ➔ 10 ÷ 7 ≈ 1.428, 1.428 ≈ 1.43

Q18. 5 ➔ 2 : 1 = 10 ÷ 5

Q19. 40 000 ➔ 39 513 ≈ 40 000

Q20. 155 ➔ 62000 ÷ 400 = 155

Q21. 56 ➔ Blue ➔ 3u, Orange ➔ 4u, 3u ➔ 24, 1u ➔ 24 ÷ 3 = 8, 3u + 4u = 7u, 7u ➔ 8 x 7 = 56

Q22. $\frac{2}{3}$ ➔ Wei ling ➔ $\frac{4}{5}$ x $\frac{5}{6}$ = $\frac{2}{3}$

Q23. $\frac{7}{40}$ ➔ $\frac{7}{8}$ ÷ 5 = $\frac{7}{8}$ x $\frac{1}{5}$ = $\frac{7}{40}$

Q24. 48 cm² ➔ $\frac{1}{2}$ x 12 x 8 = 48

Q25. 16 ➔ 20 x 2 = 40, $\frac{40}{1}$ x $\frac{2}{5}$ = 16

Q26. 3:7 ➔ A + B 200, A ➔ 60, B ➔ 200 − 60 = 140, A:B, 60 : 140, 30:70, 3:7

Q27. 48 ➔ 48 ÷ 6 = 8, 48 ÷ 4 = 12

Q28. 324cm² ➔ 36 ÷ 2 = 18, 18 x 12 x 0.5 = 108, 108 x 3 = 324

Q29. $18 ➔ 2 pens + 1 pen = 3pens, 13 ÷ 3 = 4R1, 2 x 2 = 4, 4 x 4 = 16, 16 + 2 = 18

Q30. No model answer available

Q1. $1302 ➔ 4557 x $\frac{2}{7}$ = 1302

Q2. 11 ➔ 2U ➔ 28, 1U ➔ 28 ÷ 2 = 14, 14 x 3 = 42, 42 − 31 = 11

Q3. 102$\frac{2}{3}$ cm ➔ 1u ➔ 308 ÷ 3 = 102$\frac{2}{3}$

Q4. 14litre ➔ Capacity of Fish tank ➔ 6 x 3 = 18, $\frac{7}{9}$ x 18 = 14

Q5. 75cm² ➔ 5 x 5 = 25, 5 x 2 = 10, 10 + 5 = 15, $\frac{1}{2}$ x 15 x 10 = 75

Q6. $244➔ Alex + Benedict (1u) ➔ 260, Alex + Caleb (6u)➔ 340, 5u➔ 340 – 260 =80, 1u➔ 80÷5=16, 260-16=244

Q7. $23➔ 17 belts + 11 watches➔ 1909, 1 watch➔ 6 belts, 11 watches➔ 6 x 11 = 66 belts, 17 belts + 66 belts ➔1909, belt ➔1909 ÷ 83 = 23

Q8. 32cm²➔ ½ x 35 x 27 = 486, 486 ÷ 3 = 162, 162 x 2 = 324

Q9. 7576➔ 8u + 2u +1u = 11u, 1u➔ 10417 ÷ 11 = 947, 8u➔ 947 x 8 = 7576

Q10. 7➔ 7 girls➔ 2 x 7 = 14, 3 boys➔ 3 x 3 = 9, 14 – 9 = 5

Q11. $1268.75➔ 4u ➔580, 1u➔ 580÷4=145, 145 x 7 = 1015, 1015 ÷ 4 = 253.75, 253.75 x 5 = 1268.75

Q12. 553➔ 6u-5u=1u, 1u ➔57, adults 57 x 6 = 342, Children➔ 57 x 5 = 285, 342 – 26=316, 285 – 48=237, 237 +316=553

Q13. 106➔ 6u➔ 176 – 116 =60, 1u➔ 60 ÷ 6 = 10, 116 – 10 = 106

Q14. 108➔ 3u➔ 1p, 3u x 3u➔ 3p, 9u➔ 3p, 9u - 2u = 7u, 7u➔ 29 + 34 = 63, 1u➔ 63 ÷ 7 =9, 9 x 5 = 45, 45 + 63 = 108

Q15. 32cm➔ Area of triangle ABC➔ ½ x 7 x 12 = 42, Area of square X ➔42 + 122 = 64, $\sqrt{64}$ = 8, 8 X 4 = 32

Q16. 4490➔ 9u + 7u = 16u, ➔0160 ÷ 16 = 1260, Children➔ 1260 x 7 = 8820, 8820 – 160 = 8660, girls➔ 8660 ÷ 2 = 4330, 4330 + 160 = 4490

Q17. 68 ➔$\frac{1}{3}=\frac{4}{12}$, $\frac{1}{4}=\frac{3}{12}$, 1 - $\frac{1}{3}$ - $\frac{1}{4}$ = $\frac{5}{12}$, 2p➔ 170, 1p ➔170÷2= 85, 3p➔85 x 3 =255, 5u➔ 255, 1u➔ 255÷5=51, 3u➔ 51 x 3 = 153, 153-85=68

Q18a. $\frac{7}{16}$ litre   Q18b. $\frac{9}{80}$ litre
Syrup : water, 2u :5u, 2u$\frac{1}{8}$, 1u$\frac{1}{8}$ ÷ 2 = $\frac{1}{16}$, 2u + 5u = 7u, $\frac{1}{16}$ x 7 = $\frac{7}{16}$, $\frac{7}{16}$ – $\frac{1}{10}$ = $\frac{27}{80}$
$\frac{27}{80}$ ÷ 3 = $\frac{9}{80}$