Name : _____

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2011 Semestral Assessment 2

Paper 1

Booklet A

31 October 2011

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.

103

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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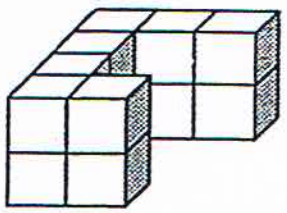
1) Round off the value of \$650 200 ÷ 40 to the nearest hundred dollars.

(1) \$16 250
(2) \$16 255
(3) \$16 300
(4) \$16 355

2) 4 289 150 is 80 thousands less than 80 000.

(1) 4 369 150
(2) 4 297 150
(3) 4 209 150
(4) 4 209 000

3) The solid is made up of 1-cm cubes. What is the volume of the solid?



(1) 11 cm^3
(2) 12 cm^3
(3) 14 cm^3
(4) 16 cm^3

4) Which one of the following has the smallest value?

(1) $\frac{13}{20}$ (2) $\frac{9}{10}$

(3) $\frac{7}{8}$ (4) $\frac{2}{5}$

5) Find the value of $\frac{4}{9} \times \frac{21}{8}$

(1) $\frac{1}{2}$ (2) $\frac{7}{18}$

(3) $1\frac{1}{6}$ (4) $1\frac{2}{5}$

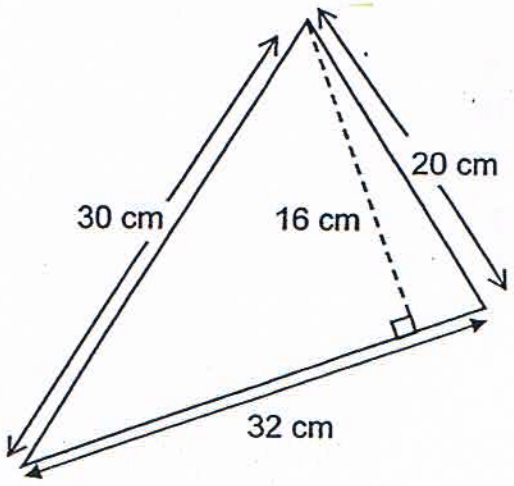
6) The ratio of the number of Jake's marbles to the number of Luke's marbles was 3 : 5. After Luke gave $\frac{1}{5}$ of his marbles to his brother, Luke had 6 marbles more than Jake. How many marbles did Jake have?

(1) 18 (2) 11

(3) 7 (4) 5

105

7) The figure below is not drawn to scale. What is the area of the whole triangle?



(1) 240 cm²

(2) 256 cm²

(3) 320 cm²

(4) 480 cm²

8) Express 45.8 km in metres.

(1) 0.0458 m

(2) 0.458 m

(3) 4 580 m

(4) 45 800 m

9) The lengths of 4 ropes are 12.5 m, 7 m, 21.09 m and 5.01 m. What is the average length of the ropes?

(1) 11.4 m

(2) 11.625 m

(3) 27.15 m

(4) 45.6 m

10) Express $\frac{5}{8}$ as a percentage.

(1) 6.25 %

(2) 12.5 %

(3) 37.5 %

(4) 62.5 %

11) In 2007, Helina was 78kg. She was 3 times as heavy as her granddaughter. Every year, Helina loses 2 kg in mass while her granddaughter gains 3 kg in mass. What is their total mass at the end of 2011?

(1) 105 kg

(2) 107 kg

(3) 108 kg

(4) 109 kg

12) Mr Toa spent $\frac{7}{12}$ of his salary on his household expenses. Then he distributed $\frac{3}{5}$ of his remaining salary among his 4 children. What fraction of the salary did each child receive?

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

(2) $\frac{1}{16}$

(3) $\frac{3}{20}$

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

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13) A bottle contains 2.35 ℓ of rose juice. Tinnia pours 60 mℓ of rose juice from the bottle into a glass. How much rose juice is left in the bottle?

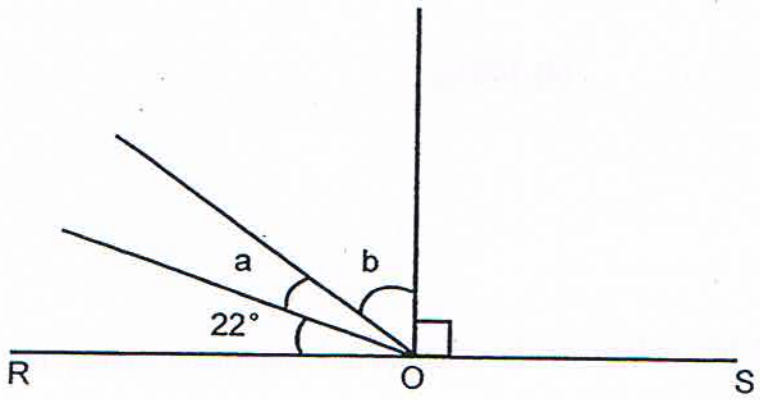
(1) 1.75 ℓ

(2) 2.29 ℓ

(3) 2.344 ℓ

(4) 2.41 ℓ

14) The figure below is not drawn to scale. ROS is a straight line. The ratio of $\angle a$ to $\angle b$ is 1 : 3. Find $\angle b$.



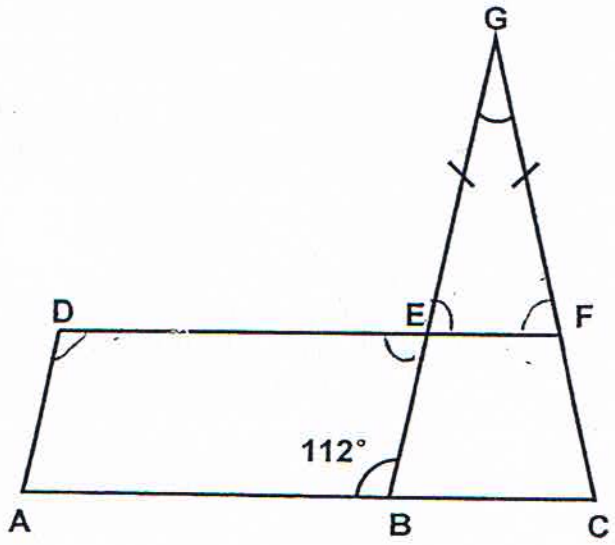
(1) 17°

(2) 22°

(3) 51°

(4) 68°

15) The figure below is not drawn to scale. Given that ABED is a parallelogram, find $\angle EGF$.



(1) 44°

(2) 68°

(3) 112°

(4) 136°

End of Booklet A

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Name : _____ ( )

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2011 Semestral Assessment 2

Paper 1

Booklet B

31 October 2011

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 8 printed pages including the cover page.

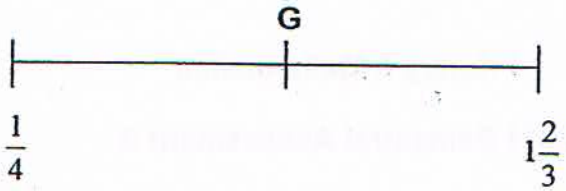
Questions 16 to 25 carry 1 mark each. Write down your answers in the spaces provided. For questions which require units, give your answers in the units stated. **[10 marks]**

Do not write in this space.

16) Find the total value of the digits 6 and 1 in 4 365 912.

Ans : _____

17) Given that **G** is the midpoint of $\frac{1}{4}$ and $1\frac{2}{3}$, find the value of **G**.



Ans : _____

18) Add 12.3 to 0.04. Express your answer as a fraction in its simplest form.

Ans : _____

Do not write in this space.

19) Mrs Go paid $74 for 40 identical files. How much did each file cost?

Ans : $_____

20) Express 79.09 kg in kg and grams.

Ans : _____ kg _____ g

21) From January to August in 2009, Eddic sold an average number of 7.5 motorbikes per month. He did not sell any motorbikes in the next 4 months. On the average, how many motorbikes did he sell per month in 2009?

Ans : _____

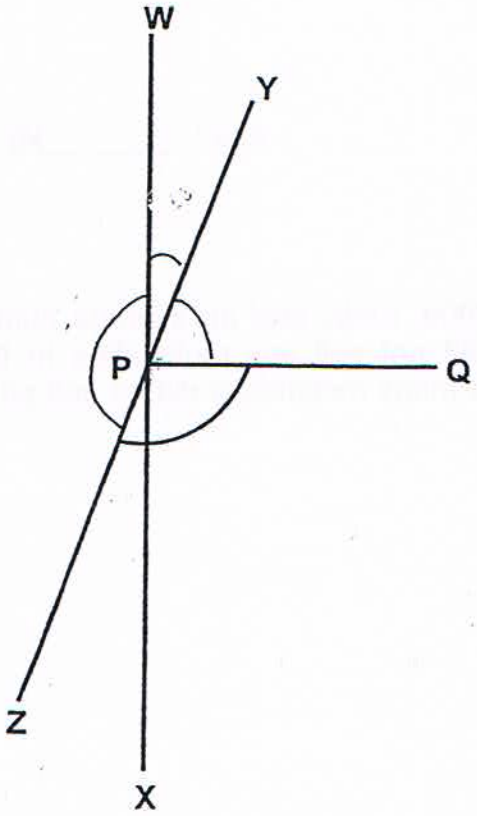
113

22) Marvy sold 120 cupcakes at a funfair. Kikito sold 40% of what Marvy sold. How many more cupcakes than Kikito did Marvy sell?

Ans : _____

Do not write in this space.

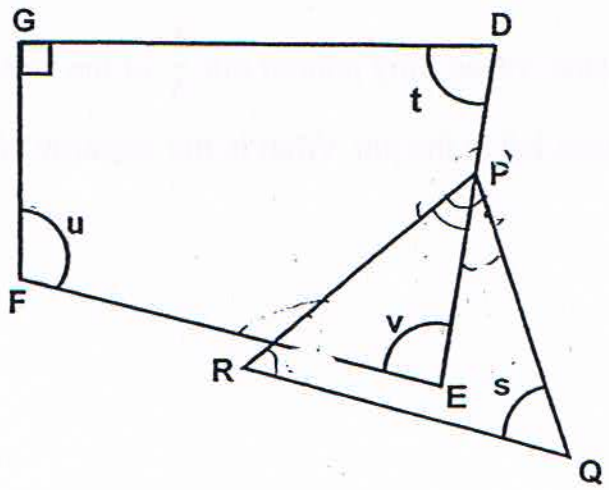
23) The figure below is not drawn to scale. WX, YZ and PQ are straight lines. Given that $\angle QPX = 90°$, $\angle WPZ = 155°$, find $\angle QPZ$.



Ans _____ °

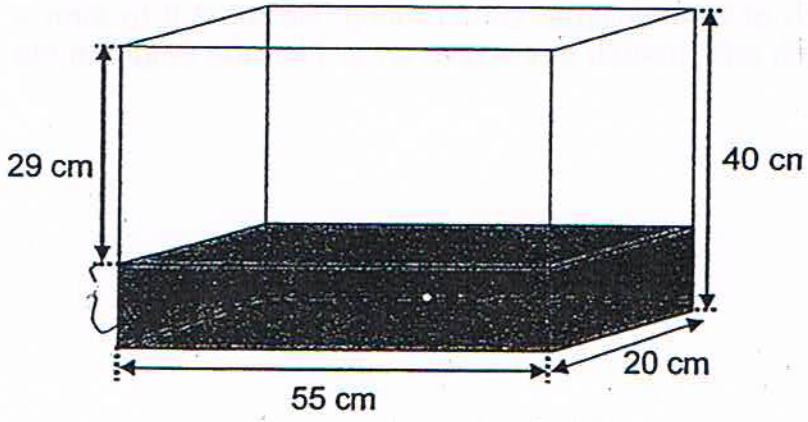
24) The figure below is not drawn to scale. Given that PQR is an equilateral triangle, find the sum of ∠s, ∠t, ∠u and ∠v.

Do not write in this space.



Ans : _____ °

25) Find the volume of water in the tank.



Ans : _____ cm^3

115

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) $\frac{2}{3}$ of a jug was filled with lime juice. When Troy poured out $\frac{1}{5}$ of the lime juice, there was 78 mℓ of lime juice left in the jug. What is the capacity of the jug?

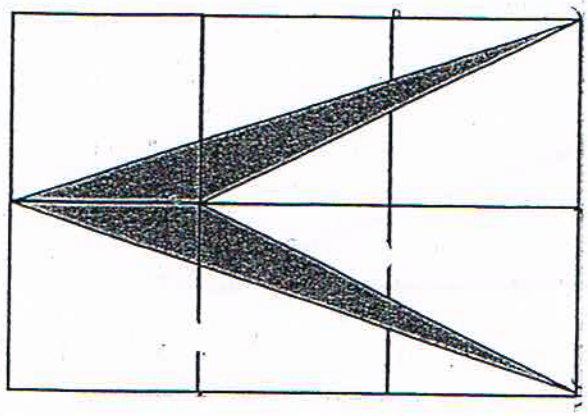
Ans : _____ mℓ

27) Jun Tong had a piece of wire which is 260 cm long. He used it to form a rectangle with its length and breadth in the ratio 3 : 2. Find the length of the rectangle.

Ans : _____ cm

28) The figure below is made up of squares of side 6 m each. Find the area of the shaded parts.

Do not write in this space.



Ans : _____ m^2

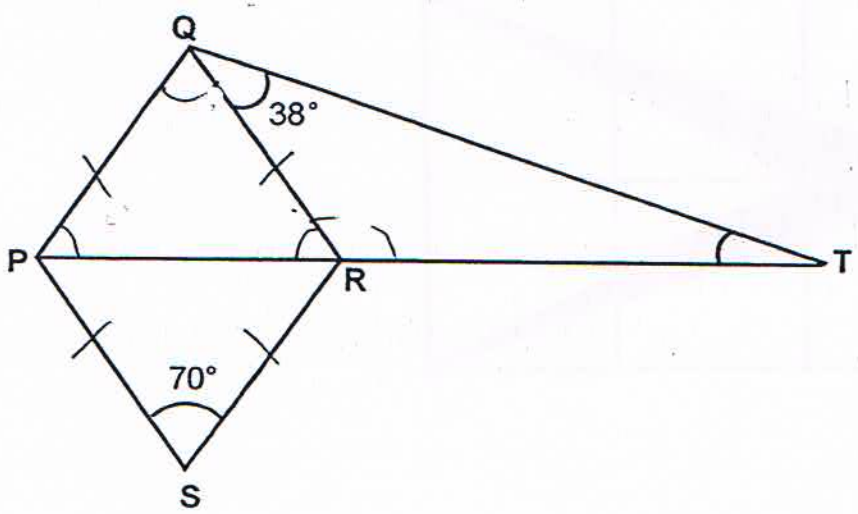
29) At a party, the number of men is $\frac{5}{7}$ the number of women. After some time, 12 more men joined in and 6 women left the party. In the end, there were 4 more women than men. How many men were at the party at first?

Ans : _____

17

30) The figure is not drawn to scale. PQRS is a rhombus and PRT is a straight line. Find ∠QTR.

Do not write in this space.



Ans : _____ °

End of Paper 1

Name: _____ ( )

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2011 Semestral Assessment 2

Paper 2

31 October 2011

Paper 1	40
Paper 2	60
Total Mark	100

_____

Parent's/Guardian's Signature

18 QUESTIONS
60 MARKS
TOTAL TIME FOR PAPER 2: 1 HOUR 40 MINUTES

INSTRUCTIONS TO CANDIDATES

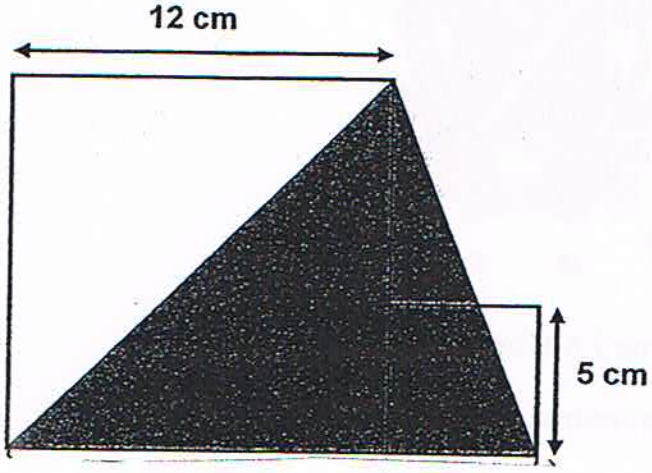
Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
The use of an approved calculator is expected, where appropriate.

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]

Do not write in this space.

1 The figure below shows a shaded triangle overlapping two squares. Find the area of the shaded triangle.



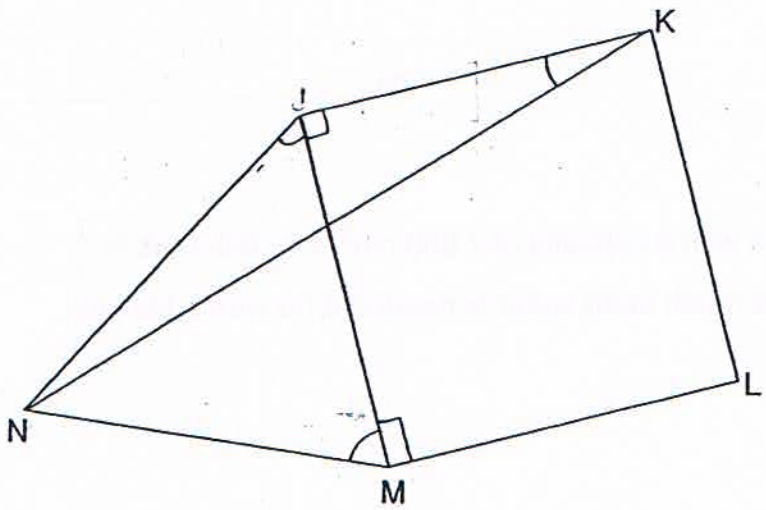
Ans : _____ cm²

2) 160 children went on a learning journey to the zoo. 36 of them are girls. What percentage of the children are boys?

Do not write in this space.

Ans : _____%

3) The figure below is not drawn to scale. JKLM is a square and JMN is an equilateral triangle. Find ∠JKN.

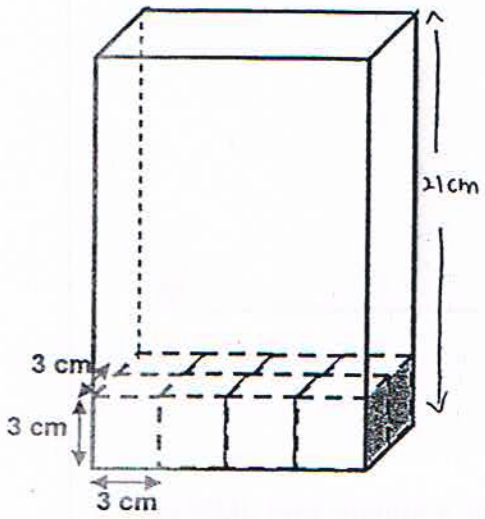


Ans : _____°

121

4) Popin used identical cubes of edge 3 cm to fill a cuboid completely as shown below. The height of the cuboid is 21 cm. Find the total number of cubes she used to fill the cuboid.

Do not write in this space.



Ans : _____

5) Taylor has a fish tank with a capacity of 7 000 cm^3. The fish tank is $\frac{1}{7}$ filled with water. How much more water is needed if he wants his tank to be $\frac{3}{4}$ full?

Ans : _____ cm^3

For question 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]

Do not write in this space.

6) Mdm Prashim spent $\frac{7}{10}$ of her money on 8 tomatoes and 12 eggs. She spent the rest of her money on 3 tomatoes and 6 eggs. Find the total number of tomatoes Mdm Prashim could buy if she were to spend all her money on tomatoes.

Ans: _____ (3 m)

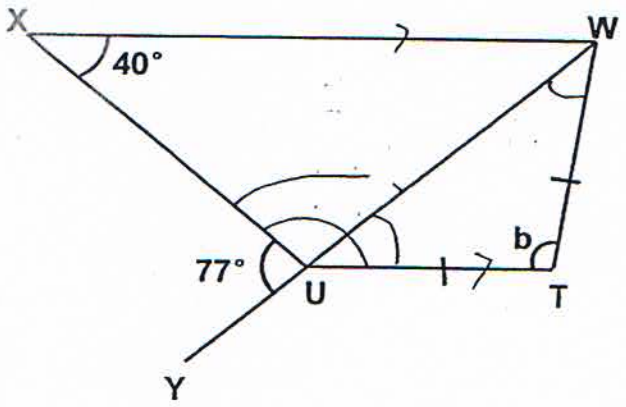
123

7) The usual price of a watch was $950. Mr Khen bought the watch at a discount of 12%. In addition, he had to pay 7% GST on the discounted price. If Mr Khen had used a fifty-dollar voucher to pay for the watch, how much did he pay in cash?

Do not write in this space.

Ans: _____ (3 m)

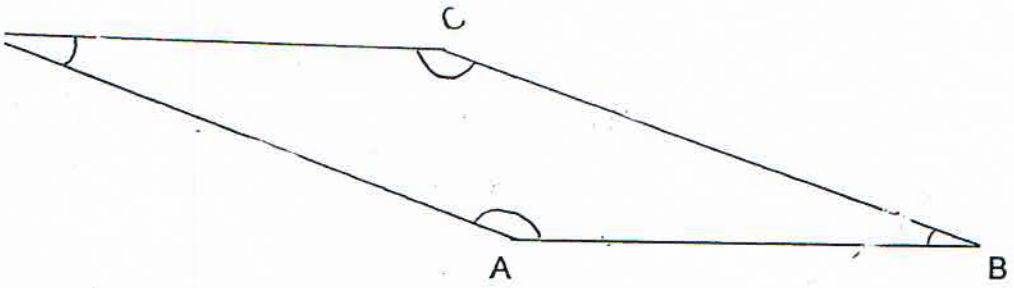
8) The figure below is not drawn to scale. UTWX is a trapezium and WY is a straight line. Find ∠b.



Ans: _____ (3 m)

9) In the space below, draw and label a parallelogram ABCD in which CB = 7.4 cm and ∠DAB = 160°.
The line AB has been drawn for you. (3m)

Do not write in this space.



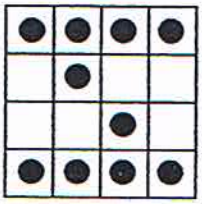
125

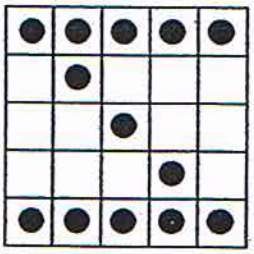
10) The following figures show a sequence of patterns of an arrangement of dots.

Do not write in this space.

(a) How many dots are there in the first row of Pattern 6?

(b) How many dots are there altogether in Pattern 22?





1st row – 3 dots
+
Pattern 1 (7)

1st row – 4 dots
+
Pattern 2 (10)

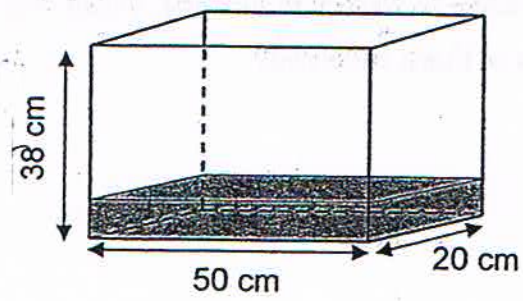
1st row – 5 dots
+
Pattern 3 (13)

Ans: (a) _____ (1m)

(b) _____ (2m)

11) Tomy had a Tank P measuring 50 cm by 20 cm by 38 cm which was 28% filled with water. Water from a tap flowed into the tank at 5.7 ℓ per minute. How long would it take to fill up the tank completely?

Do not write in this space.



Ans: _____ (3 m)

12) A coach can carry a total of 35 adults or 49 children. If there were already 135 adults and 87 children seated in 6 such coaches, how many more children could be seated in these 6 coaches?

Ans. _____ (4m)

127

13) Allan and Jackle received a fixed weekly allowance from their parents. Allan received $4 more than Jackle as weekly allowance. Each of their weekly expenditure was $28 and they saved the rest. When Allan had saved $80, Jackle only saved $40. Both of them took the same number of weeks to save this amount. What was the total weekly allowance that both of them received?

Do not write in this space.

Ans: _____ (4m)

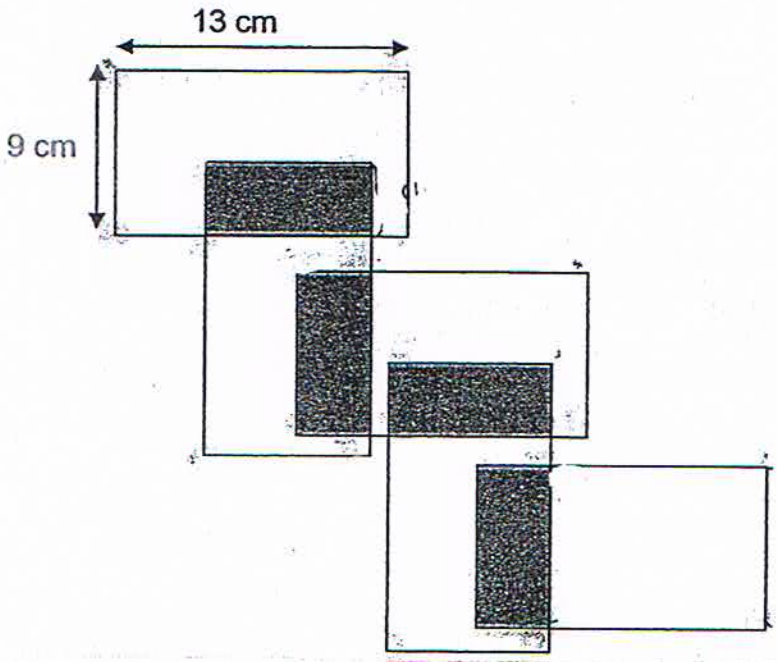
14) There are 3 tables, F, G and H. The average mass of Table F, Table G and Table H is 26.8 kg. The mass of Table G is thrice that of Table H. Table F is 2.2 kg lighter than Table G. Find the average mass of Table G and Table H .

Do not write in this space.

Ans: _____ (4m)

15) The figure below shows 5 identical rectangles measuring 13 cm by 9 cm overlapping equally over one another. Each shaded rectangle has a perimeter of 24 cm. What is the total area of the unshaded parts in the figure?

Do not write in this space.



Ans: _____ (5m)

16) Sparkle Jewellery shop and Twinkle Jewellery shop were having a sale. Both the shops charged their customers a 7% GST on the discounted prices of their items.

Do not write in this space.

(a) Mr Royce wanted to buy a diamond ring. Which shop would offer him a better deal?

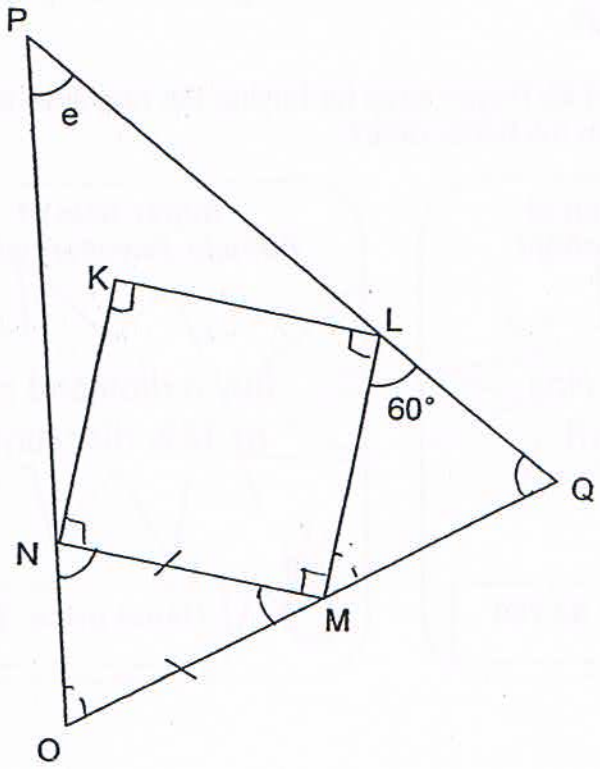
(b) How much would Mr Royce save for buying the ring from the shop which offered him the better deal?

Ans: (a) _____ (1m)

(b) _____ (4m)

17) A square KLMN is enclosed in a triangle ~~MNO~~ PQO. Given that the ratio of ∠LMQ to ∠NMO is 3 : 2, find ∠e.

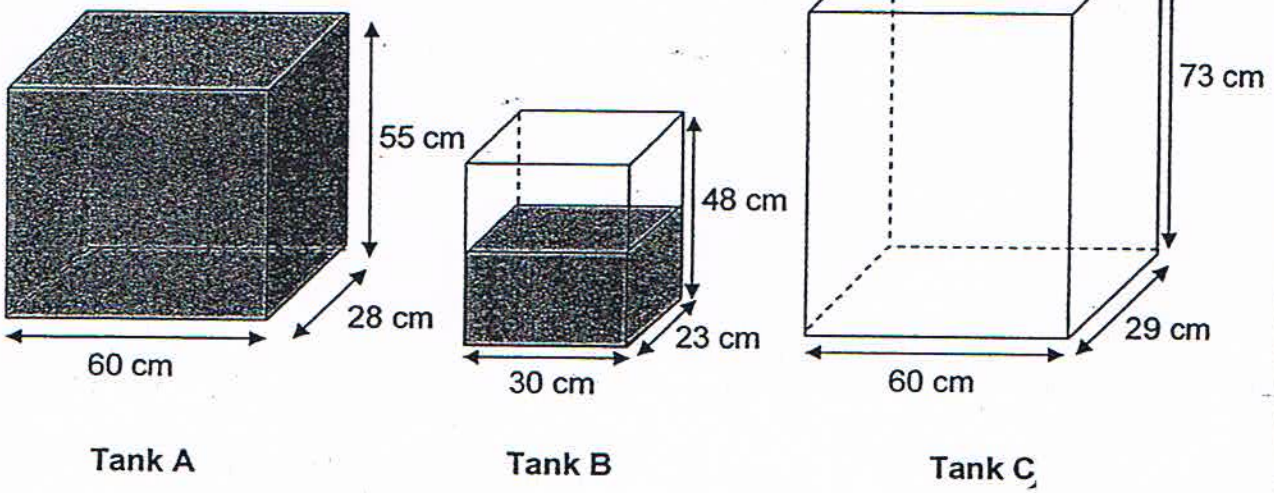
Do not write in this space.



Ans: _____ (5m)

18) Koolin has 3 tanks, A, B and C. Tank A is completely filled with water and Tank B is half-filled with water. There is no water in Tank C. He poured $\frac{7}{8}$ of the water from Tank A and all the water from Tank B into Tank C. How much more water does Koolin have to pour into Tank C so that the water level in Tank C is 3 cm from the top of the tank? Give your answer in litres.

Do not write in this space.



Tank A **Tank B** **Tank C**

Ans: _____ (5m)

End of Paper

133

ANSWER SHEET

EXAM PAPER 2011

SCHOOL : CHIJ
SUBJECT : PRIMARY 5 MATHEAMATICS

TERM : SA2

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

16)60010 **17)23/24** **18)$12\frac{17}{50}$** **19)$1.85** **20)79kg 90g**

21)5 **22)72** **23)115°** **24)330°** **25)12100cm3**

26)146.25ml **27)78cm** **28)36m2** **29)44 men** **30)17°**

Paper 2

1) 12cm + 5cm = 17cm (Base)
½ x 17 x 12 = 102cm2

2) 160 – 36 = 124 (boys)
124/160 x 100% = 77.5%

3) 90° + 60° = 150°
180° – 150° = 30°
30° ÷ 2 = 15°

4) cubes→3cm x 3cm x 3cm
= 27cm3
Length→4 cubes
Breadth→2 cubes
Height→21cm÷3cm
= 7 cubes
4 x 2 x 7 = 56

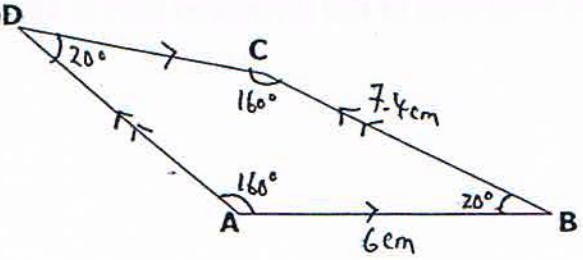
5) 1/7 x 7000 = 1000 (1/7 filled)
¾ x 7000 = 5250 (¾ full)
5250 – 1000 = 4250cm3

6) 7u→8T + 12E
3u→3T + 6E
6u→6T + 12E
8T + 12e – 6T + 12E→2T (1u)
2 x 10 = 20

7) 100% - 12% = 88%
88% x $950 = $836
107% x $836 = $894.52
$894.52 – $50 = $844.52
He paid $844.52 in cash

8) 180° – 77° = 103°
180° – (103° + 40°) = 37°
180° – 40° = 140°
140° – 103° = 37°
180 – (37° x 2) = 106°

9) D



10)a)6 + 2 = 8 dots
b)1st row of Pattern 22→24
3rd row of Pattern→24
Diff between 1st row & 3rd row→Pattern no.
24 + 24 + 22 = 70dots.

11)50 x 20 x 38 = 38000
100% - 28% = 72% (more)
72% x 38000 = 27360
27360cm3 = 27 360ml
= 27.360ml
27.360L÷5.7L = 4.8
It would take 4 4/5 minutes.

12)18

13)$80 – $40 = $40
$40÷$4 = 10 (weeks)
80 ÷10 = 8 (A save)
40÷10 = 4 (J save)
28 + 8 = 36
28 + 4 = 32
36 + 32 = 68
The total weekly allowance is $68

14)26.8 x 3 = 80.4 (F,G & H)
80.4 + 2.2 = 82.6
82.6 ÷7 = 11.8 (1u)
11.8 x 4 = 47.2
47.2÷2 = 23.6
The average mass is 23.6kg

15)24 – (9x2) =6
6÷2 = 3
9 x 13 = 117 (1 rect.)
9 x 3 = 27 (shaded area)
117 – 27 = 90 (a)
117 – (27x2) = 63 (b)
90 x 2 = 180
63 x 3 = 189
180 + 189 = 369
The total area of the unshaded part is 369cm2

16)a)sparkle Jewellery shop.
b)100% - 8% = 92%
100% - 12% = 88%
92% x 4750 = 4370 (A)
88% x 5050 = 4444 (B)
107% x 4370 = 4675.90 (A)
107% x 4444 = 4755.08 (B)
4750 – 4675.90 = $74.10

17)180° – 90° = 90°
90° ÷5 = 18° (1u)
18° x 3 = 54° (∠LMQ)
18° x 2 = 36° (∠NMO)
180° – 36° = 144°
144° 2 = 72° (∠NOM)
180° – (54° +60°)= 66° (∠LQM)
180° – (72° +66°) = 42°

18)7/8 x 60 x 28 x 55 = 80850 (A)
½ x 30 x 20 x 48 = 16560 (B)
80850 + 16560 = 97410
73 – 3 = 70
60 x 29 x 70 = 121800
121800 – 97410 = 24390
24390cm3 = 24390ml
= 24.29L

END