Name : _____ ( )

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2017 Semestral Assessment Two

Paper 1

Booklet A

25 October 2017

15 QUESTIONS
20 MARKS

TOTAL TIME FOR BOOKLETS A AND B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.
The use of calculators is **NOT** allowed.

*This booklet consists of **9** 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) in the Optical Answer Sheet (OAS). (20 marks)

---

1. 46 thousands + 27 tens is the same as _____.

   (1) 4627

   (2) 46 027

   (3) 46 270

   (4) 460 270

2. In 34.215, what does the digit 5 stand for?

   (1) 5 ones

   (2) 5 tenths

   (3) 5 hundreds

   (4) 5 thousandths

3. Which one of the following fractions is nearest to 1?

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

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

   (3) $\frac{5}{8}$

   (4) $\frac{5}{9}$

4. Round 62 497 to the nearest thousand.

(1) 62 000

(2) 62 400

(3) 62 500

(4) 63 000

5. What is the missing number in the blank?

8 : 12 = _____ : 45

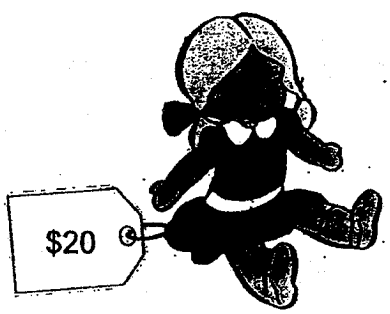
(1) 15

(2) 2

(3) 30

(4) 41

6. The cost of the doll shown below does not include 7% GST. How much is the GST?



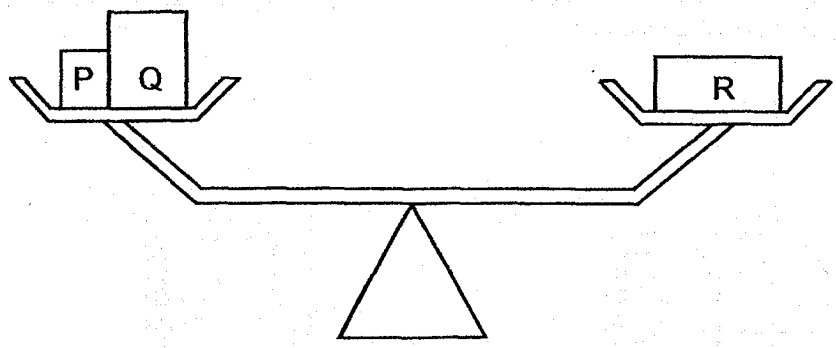
(1) $1.40

(2) $5.00

(3) $21.40

(4) $35.00

7. The figure below shows three boxes on a balance scale.



The mass of Box R is 120 g. Find the average mass of the three boxes.

(1) 40 g

(2) 80 g

(3) 120 g

(4) 240 g

8. Ahmad sold a total of 1285 lollipops in 5 days. He sold 345 lollipops on one of the days. What was the average number of lollipops he sold for the remaining days?

(1) 188

(2) 235

(3) 257

(4) 940

9. The solid figures below are made up of 1-cm cubes.
How many 1-cm cubes must be added to Figure B so that it has the same volume as Figure A?

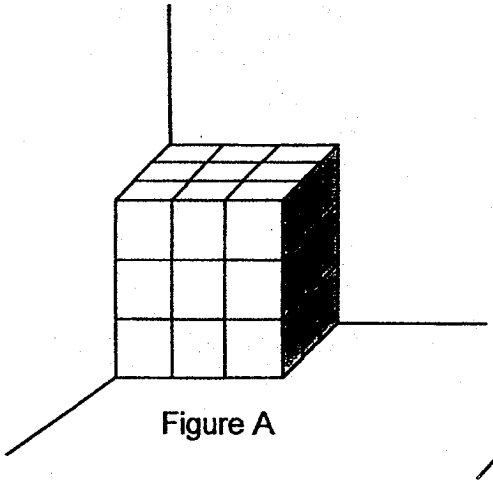


Figure A

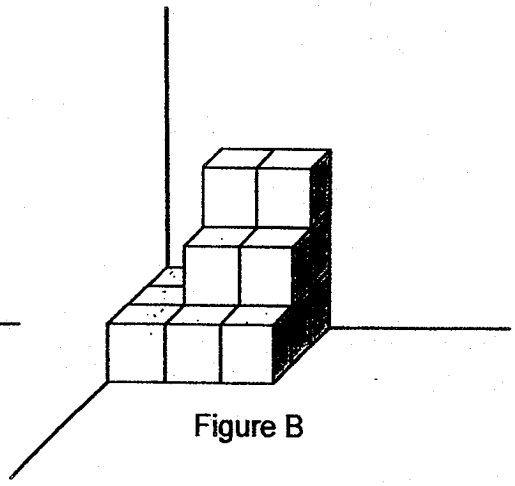


Figure B

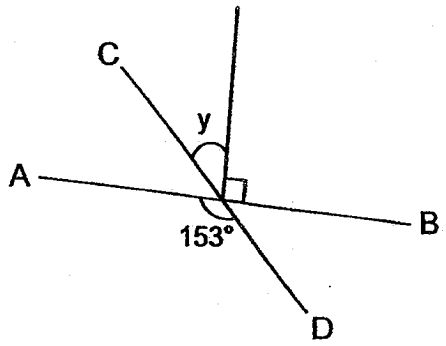
(1) 5

(2) 7

(3) 12

(4) 15

10. Look at the figure below. AB and CD are straight lines. Find $\angle y$.



(1) 27°

(2) 63°

(3) 90°

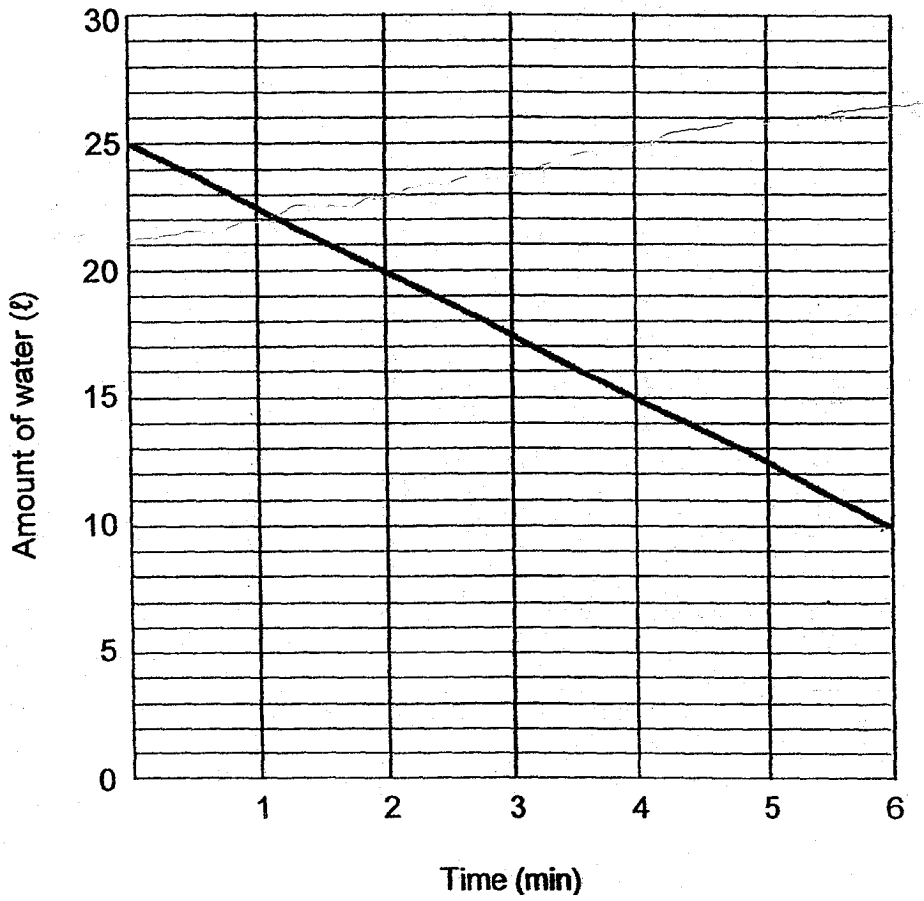
(4) 117°

11. Arrange the following masses from the lightest to the heaviest.

6.25 kg, 6 kg 205 g, $6\frac{2}{5}$ kg

	Lightest		Heaviest
(1)	6.25 kg,	6 kg 205 g,	$6\frac{2}{5}$ kg
(2)	6 kg 205 g,	6.25 kg,	$6\frac{2}{5}$ kg
(3)	$6\frac{2}{5}$ kg,	6 kg 205 g,	6.25 kg
(4)	$6\frac{2}{5}$ kg,	6.25 kg,	6 kg 205 g

12. A tank was completely filled with water. A pump was turned on for some time to drain water from the tank. The line graph shows the amount of water in the tank over 6 minutes.



After the 6th minute, how long more **would** it take for the water to be drained out of the tank completely?

(1) 1 min

(2) 2 min

(3) 3 min

(4) 4 min

13. At Bus Stop P, the ratio of the number of boys to the number of girls on the bus was 5 : 6. At Bus Stop Q, 18 boys boarded the bus. The ratio of the number of boys to the number of girls became 7 : 3. How many boys were there on board the bus in the end?

(1) 10

(2) 28

(3) 45

(4) 63

14. $\frac{1}{5}$ of the beads used to string a necklace are white. The remaining beads are pink and blue. There is an equal number of pink and blue beads. What percentage of the beads used is pink?

(1) 20%

(2) 40%

(3) 60%

(4) 80%

15. Keira spent $\frac{2}{3}$ of her money on 6 pencils and 12 erasers. The cost of each pencil was 3 times the cost of each eraser. She used all her remaining money to buy more pencils. How many pencils did Keira buy altogether?

(1) 21

(2) 15

(3) 11

(4) 5

Name : _____ ( )

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2017 Semestral Assessment Two

Paper 1

Booklet B

25 October 2017

Booklet A	**20**
Booklet B	**25**
Total (Paper 1)	**45**

TOTAL TIME FOR BOOKLETS A AND B: 1 hour

INSTRUCTIONS TO CANDIDATES

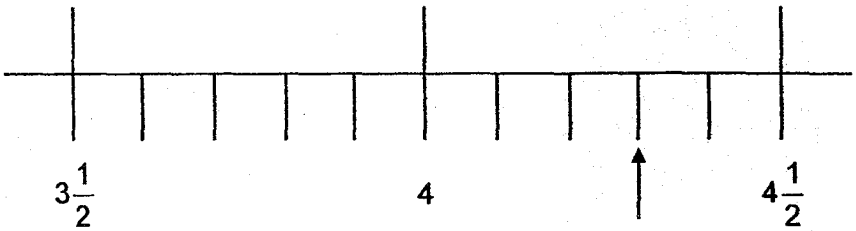
Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of calculators is **NOT** allowed.

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

Questions **16** to **20** carry 1 mark 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. (5 marks)

Do not write in this space

16. Part of a scale is shown below. What is the value indicated by the arrow? Give your answer as a mixed number in the simplest form.



Ans : _____

17. Find the value of 15 – 0.66.

Ans : _____

18. Find the value of 0.47×600.

Do not write in this space

Ans: _____

19. Express $\frac{13}{25}$ as a percentage.

Ans _____ %

20. The table below shows the postage charges for sending parcels to Ethiopia.

Mass Step Not Over	Postage Charge
100 g	$3
Per additional step of 100 g or part thereof	$0.90

What is the postage charge for sending a parcel with a mass of 350 g to Ethiopia?

Ans : $ _____

Questions **21** 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. (20 marks)

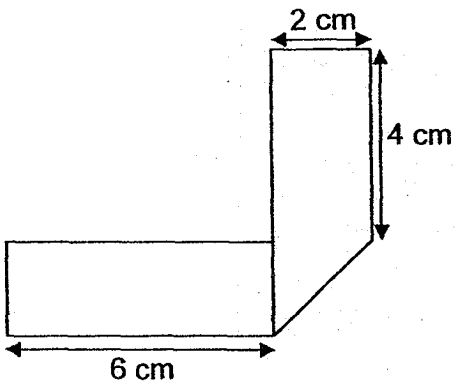
Do not write in this space

21. By rounding each of the following numbers to the nearest whole numbers, estimate the value of:

$$99.1 + 72.45 \div 2.5$$

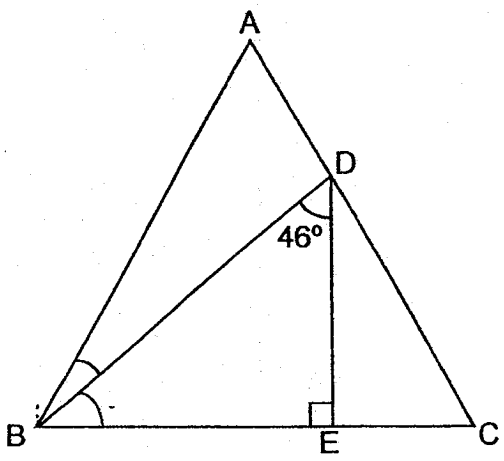
Ans : _____

22. A rectangular piece of paper was folded to form the figure as shown below. Find the area of the rectangular piece of paper before it was folded.



Ans : _____ cm^2

23. In the figure below, ABC is an equilateral triangle and ∠BDE = 46°. Find ∠ABD.

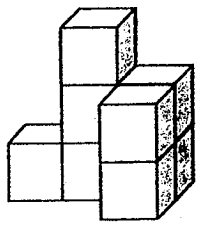


Do not write in this space

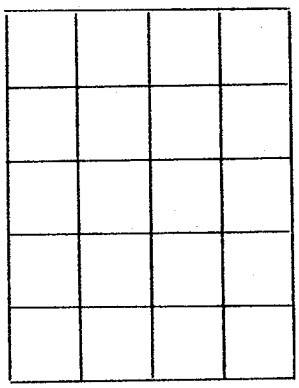
Ans : _____ °

Do not write in this space

24. Study the given solid. Draw its front view on the square grid below.

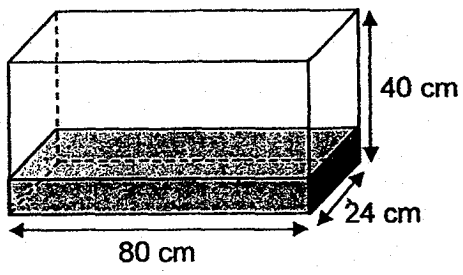


Front View



Front View

25. A rectangular tank 80 cm long by 24 cm wide by 40 cm high is filled with water up to $\frac{1}{4}$ of its height. How much more water is needed to fill the tank to $\frac{5}{8}$ of its height?



Ans : _____ ℓ

Do not write in this space

26. A total of 96 red and blue balls are arranged in a row. There are at least 4 red balls between any 2 blue balls. What is the largest possible number of blue balls arranged in the row?

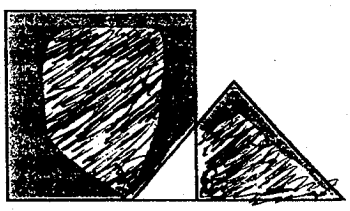
Ans : _____

27. Miss Eu started a savings account with $30 000 in a bank. The interest rate is 2% per year. How much would she have in her savings account at the end of one year?

Do not write in this space

Ans : $ _____

28. The figure below is made up of a triangle and a square, overlapping each other. $\frac{3}{4}$ of the triangle is shaded and $\frac{11}{12}$ of the square is shaded. What is the ratio of the shaded area of the triangle to the area of the whole figure? Express the ratio in its simplest form.



Ans : _____

29. A total of 220 pupils were in 3 rooms labelled A, B and C. Room A had the most number of pupils. The differences in the number of pupils between Room A and the number of pupils in the other two rooms were 8 and 15. How many pupils were there in Room A?

Do not write in this space

Ans : _____

30. Andy cut a 1.2 m long wire into two pieces. He used one piece of wire to form a rectangle of length 15 cm and breadth 11 cm. He used the other piece to form a square. What was the length of one side of the square?

Ans : _____ cm

**** End of Booklet B ****

Name: _____ ( )

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5 Mathematics

2017 Semestral Assessment Two

Paper 2

25 October 2017

Paper 1	**45**
Paper 2	**55**
Total	**100**

TOTAL TIME FOR PAPER 2 : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

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

*This booklet consists of **16** 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. Muffins are on offer in a shop.

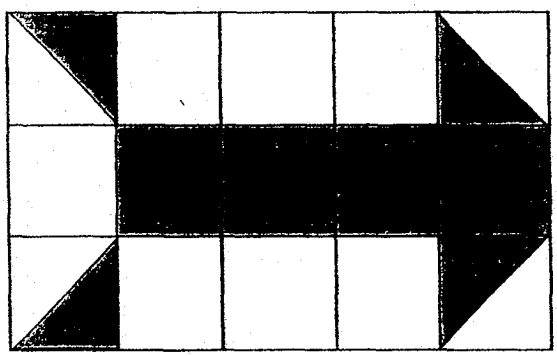
1 muffin for $1.80 3 muffins for $5

Jane wants to buy 17 muffins.

What is the least amount of money she has to pay?

Ans : $ _____

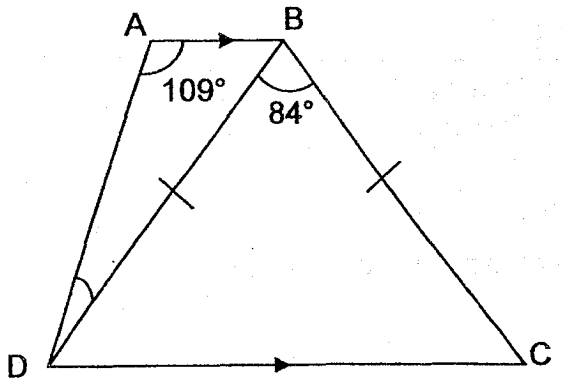
2. What percentage of the figure below is shaded?



Ans : _____ %

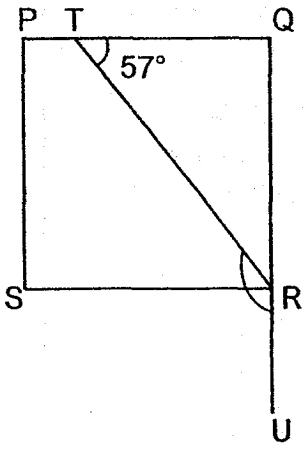
3. In the figure below, ABCD is a trapezium with $\overline{AB}$ // CD. BCD is an isosceles triangle. Find ∠ADB.

Do not write in this space



Ans : _____ °

4. PQRS is a square and QRU is a straight line. ∠QTR = 57°. Find ∠TRU.



Ans : _____ °

Do not write in this space

5. The table below shows the length of 3 pieces of ribbon.

Ribbon	Length
A	625 cm
B	813 cm
C	704 cm

Which ribbon has its length nearest to the average length of the 3 ribbons?

Ans : Ribbon _____

For questions **6** to **17**, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

Do not write in this space

6. Pancy and Esther had the same number of balloons at first. Pancy sold 52 balloons and Esther sold 90 balloons. Pancy then had 3 times as many balloons as Esther. How many balloons did each of them have at first?

Ans : _____ [3]

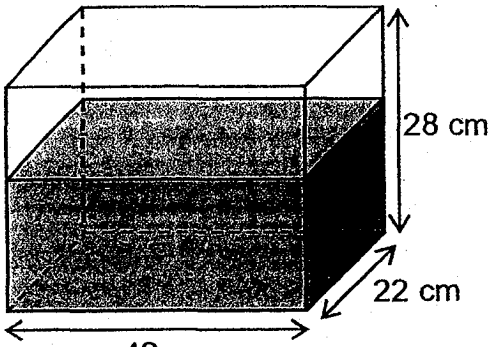
7. To make a dough mixture for baking 70 cupcakes, $1\frac{3}{8}$ kg of flour and $\frac{4}{5}$ kg less sugar than flour is needed. What is the total amount of flour and sugar needed to bake 560 cupcakes?
Give your answer as a mixed number in the simplest form.

Do not write in this space

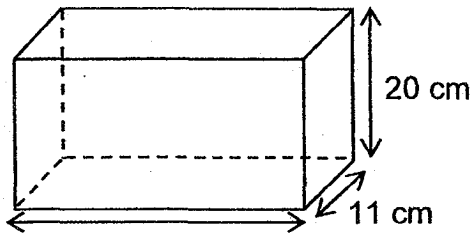
Ans : _____ [3]

8. Tank X measuring 42 cm by 22 cm by 28 cm was $\frac{4}{7}$ filled with water. Some water was then poured into another empty tank, Tank Y, and filled it up completely. What was the volume of water left in Tank X?

Do not write in this space



Tank X



Tank Y

Ans : _____ [3]

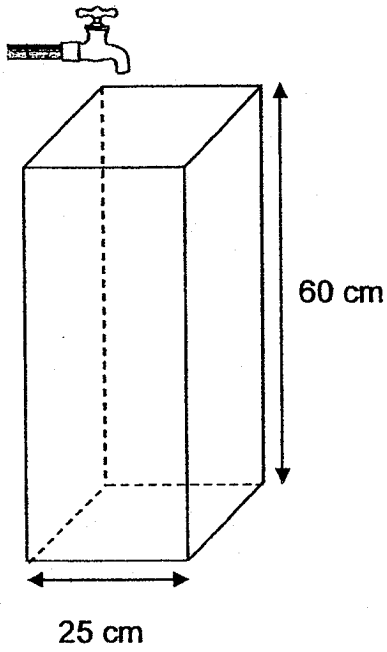
9. Timmy participated in a fund-raising activity from January to May. The average amount of money he raised for January and February was $583. The average amount of money he raised from March to May was $614. How much money did he raise altogether from January to May?

Do not write in this space

Ans : _____ [3]

10. A tank with a square base of edge 25 cm and a height of 60 cm was empty. A tap was turned on and water flowed into the tank at 1.5 ℓ per minute. At this rate, how long did it take for the tank to be filled to the brim?

Do not write in this space



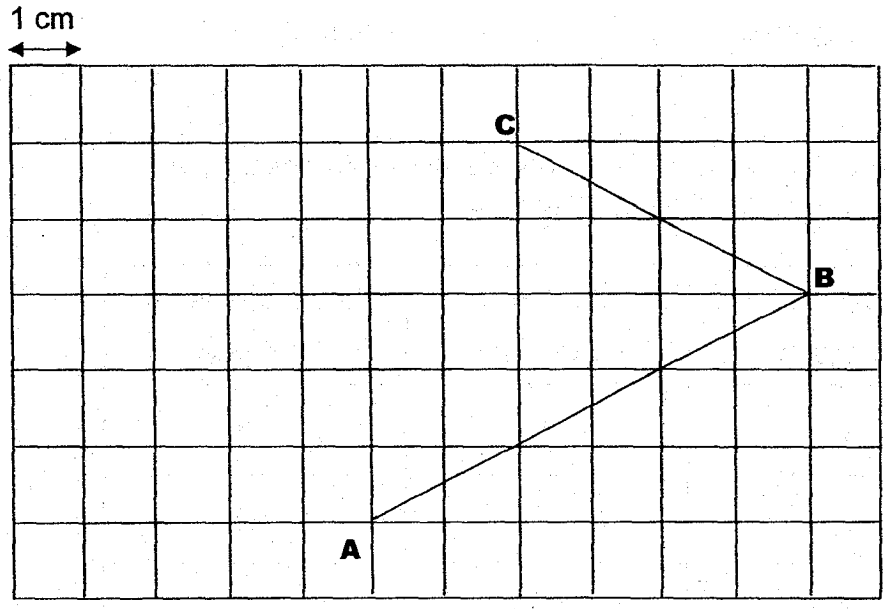
Ans : _____ [3]

11. In the square grid below, AB and BC are straight lines.

Do not write in this space

a) Measure and write down the size of ∠ABC.

b) AB and BC form two sides of a parallelogram ABCD. Complete the drawing of the parallelogram. Label the parallelogram ABCD.



[2]

Ans : (a) _____ [1]

12. Jing En uses toothpicks to form hexagons (⬡) and rhombuses (◇) that follow a pattern as shown below.

Do not write in this space

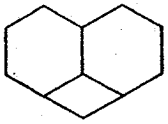


Figure 1

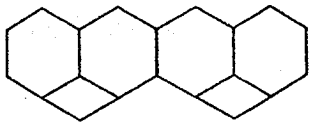


Figure 2

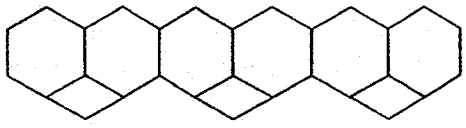


Figure 3

a) The table below shows the number of hexagons and rhombuses for the first three figures. Complete the table for Figure 4.

Figure Number	Number of hexagons	Number of rhombuses	Total number of toothpicks
1	2	1	13
2	4	2	25
3	6	3	37
4			

[1]

b) A figure in the pattern has 14 hexagons. What is the Figure Number?

c) How many toothpicks are there in Figure 90?

Ans : (b) Figure_____ [1]

(c) _____ [2]

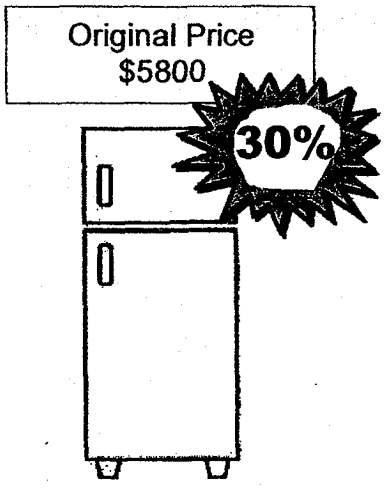
13. At an exhibition, $\frac{1}{2}$ of the tickets were sold at full price and $\frac{3}{7}$ of the tickets were sold at half price. The remaining 20 tickets were given away free. The full price of a ticket was \$24. What was the total amount of money collected from the sale of the tickets?

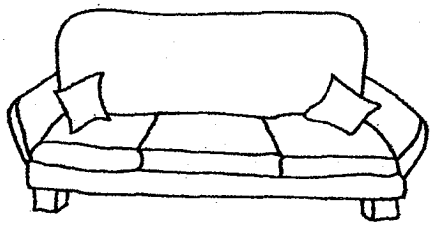
Do not write in this space

Ans : _____ [4]

14. Mrs Lee bought a refrigerator and a sofa. The ratio of the usual price of the refrigerator to the usual price of the sofa was 2 : 1.

Do not write in this space



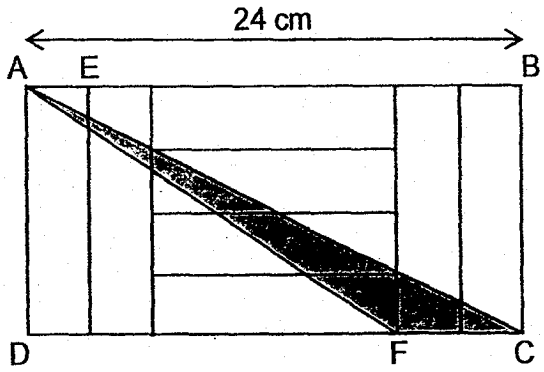


She was given a discount of 30% on the refrigerator only. How much did Mrs Lee pay for the 2 items altogether?

Ans : _____ [4]

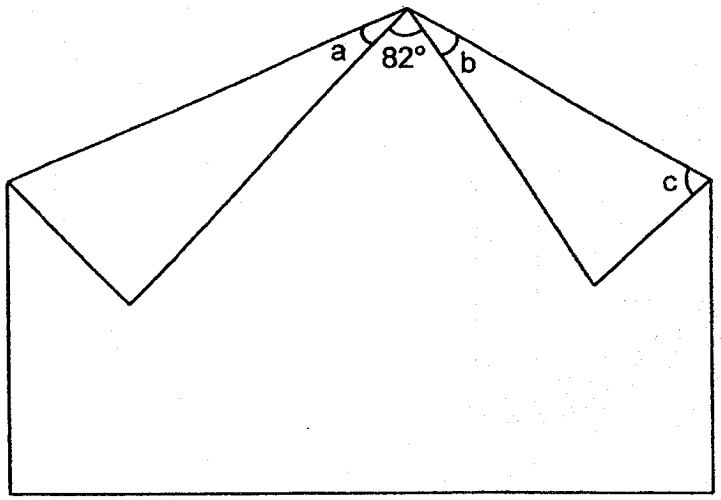
15. In the figure below, rectangle ABCD is made up of 8 smaller identical rectangles. Given that AB = 24 cm, what is the area of triangle ACF?

Do not write in this space



Ans : _____ [5]

16. A rectangular piece of paper is folded as shown below.



The ratio of the value of ∠a to the value of ∠b is 3 : 4.

(a) Find ∠b.

(b) Find ∠c.

Ans : (a) _____ [3]

(b) _____ [2]

Do not write in this space

17. Mrs Tong had some apples. $\frac{2}{9}$ of the apples were rotten and she threw them away. She gave $\frac{3}{4}$ of the remainder to her relatives. Then she sold the rest of them at 4 apples for \$2.20. She received \$231 from the sale of the apples.

How many apples did she have at first?

Do not write in this space

Ans : _____ [5]

** END OF PAPER **

EXAM PAPER 2017 (P5)

SCHOOL : CHIJ

SUBJECT : MATHEMATICS

TERM : SA2

ORDER CALL :

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

16)$4.3 = 4\frac{3}{10}$

17)15 – 0.66 = 14.34

18)0.47 x 600 = 2.82 x 100 = 282

19)13/25 x 4 = 52/100 = 52%

20)First 100g→$3

Next 200g →$0.90 x 2 = $1.80

Last 50g →$0.90

Total →$3 + $1.80 + $0.90 = $5.70

21)99 + 72 ÷ 3

= 99 + 24 = 123

22)Length →6cm + 2cm + 4cm = 12cm

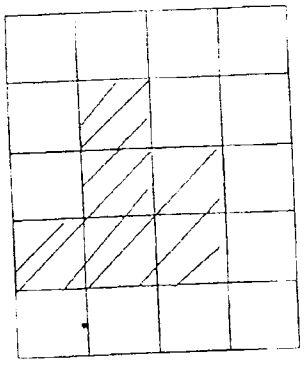
Breadth →2cm

Area →12cm x 2cm = 24cm2

23) $\angle DBE = 180^\circ - 46^\circ - 90^\circ = 44^\circ$

$\angle ABD = 60^\circ - 44^\circ = 16^\circ$

24)



25)5/8 – ¼ = 3/8

3/8 x 80 x 24 x 40 = 28800

28800ml = 28.8L

26)BRRRR = 1 group

96 ÷ 5 = 19 R1

19 + 1 = 20

27)2% = 0.02

Interest →$30000 x 0.02

= 0.06 x 10000 = 600

Total →$30000x $600 = $30600

28)Unshaded△ → ¼

Unshaded□ →1/12

Shaded △ → 4u – 1u = 3u

Shaded □ → 12u – 1u = 11u

Area of total figure→11u + 3u + 1u = 15u

3 : 15

= 1 : 5

29)220 + 8 ÷ 15 = 228 + 15 = 243

A→243 ÷ 3 = 81

30)1.2m = 120cm

120cm – 52cm = 68cm

68cm ÷ 4 = 17cm

Paper 2

1)1 group →3 muffins

17 ÷ 3 = 5 R2

$5 x 5 = $25

$1.80 x 2 = $3.60

Total →$3.60 + $25 = $28.60

2)6/15 = 2/5

2/5 = 40/100

= 40%

3) $\angle BDC = \angle BCD$

$= (180^\circ - 84^\circ) \div 2 = 48^\circ$

$\angle ADC = 180^\circ - 109^\circ = 71^\circ$

$\angle ADB = 71^\circ - 48^\circ = 23^\circ$

4) $\angle PTR = 180^\circ - 57^\circ = 123^\circ$

$\angle SRT = 180^\circ - 123^\circ = 57^\circ$

$\angle TRU = 57^\circ + 90^\circ = 147^\circ$

5)Ribbon A → 714 cm – 625cm = 89cm

Ribbon B → 813cm – 714cm = 99cm

Ribbon C → 714cm – 704cm = 10cm

ANS: Ribbon C

6)2 units = 90 – 52 = 38

1 unit = 38 ÷ 2 = 19

Have at first → 19 + 90 = 109

7)70 cupcakes (sugar) → $1\frac{15}{40} - \frac{32}{40} = \frac{55}{40} - \frac{32}{40} = \frac{23}{40}$

70 cupcakes total → $1\frac{15}{40} + \frac{23}{40} = 1\frac{38}{40}$

560 ÷ 70 = 8

560 cupcakes total → $\frac{78}{40} \times \frac{8}{1} = \frac{78}{5} = 15\frac{3}{5}$ kg

8)Volume of water in Tank X → 4.7 x 42cm x 22cm x 28cm = 14784cm3

Capacity of Tank Y → 40cm x 11cm x 20cm = 8800cm3

Volume of water left in Tank X → 14784cm3 – 8800cm3 = 5984cm3

9)Total money for Jan and Feb→$583 x 2 = $1166

Total money from March to May →$614 x 3 = $1842

Total money from Jan to May →$1166 + $1842 = $3008

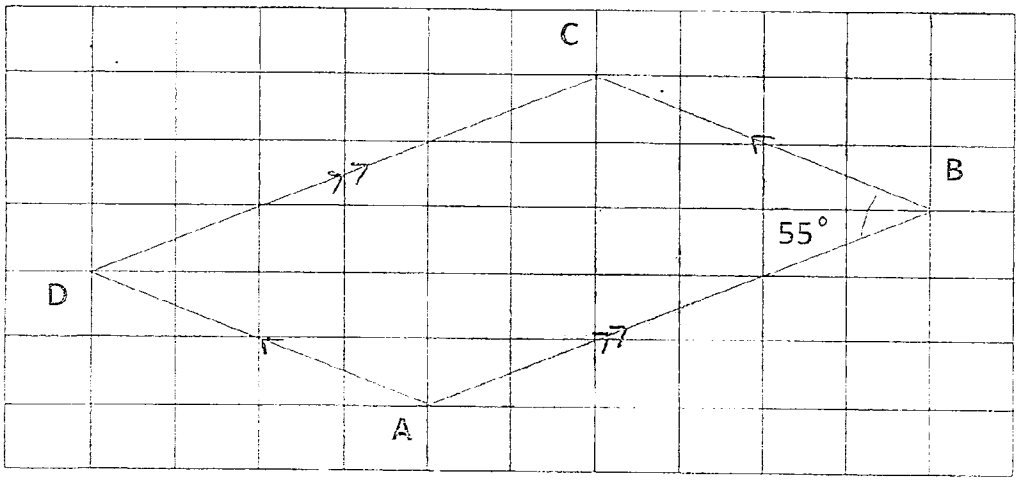
10)Capacity of Tank →25cm x 25cm x 60cm = 37500cm3

= 37.5L

1.5L →1 min

37.5L →37.5L ÷ 1.5L = 25 minutes

11)



12)a)8 / 4 / 49

b)7

c)12n + 1

= (12 x 90) + 1 = 1080 + 1

= 1801

13)1 – ½ - 3/7 = 1/14

1/14 →20

14/14→20 x 14 = 280

½ x 280 x $24 = $3360

3/7 x 280 x $12 = $1440

$1440 + $3360 = $4800

14)2 units = $5800

1 unit = $5800 ÷ 2 = $2900

Sofa →$2900

100% – 30% = 70%

Refrigerator after discount→$5800 x 70% = $4060

Total →$4060 + $2900 = $6960

15)8 units = 24

2 units = 24 ÷ 4 = 6

4 units = 24 ÷ 2 = 12

Area of triangle → ½ x 6 x 12 = 36cm2

16)a) $\angle a + \angle a + \angle b + \angle b = 180^\circ - 82^\circ = 98^\circ$

(3 units + 4 units) x 2 = 14 units

14 units = 98°

1 unit = 98° ÷ 14 = 7°

4 units = 7° x 14 = 28°

b) $\angle c = 180^\circ - 28^\circ - 90^\circ = 62^\circ$

17)Group of apples sold →$231 ÷ $2.20 = 105

Total apples sold →105 x 4 = 420

¼ →420

4/4 (remainder)→420 x 4 = 1680

7/9 →1680

1/9 →1680 ÷ 7 = 240

9/9→240 x 9 = 2160