CATHOLIC HIGH SCHOOL

END-OF-YEAR EXAMINATION (2020)

PRIMARY FIVE

MATHEMATICS

PAPER 1

(BOOKLET A)

Name : _____( )

Class : Primary 5_____

Date : 2 November 2020

Total time for Booklet A and B : 1 hour

15 questions

20 marks

Parent's signature : _____

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.

Booklet A and B consist of 14 printed pages excluding the cover pages.

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 oval (1, 2, 3 or 4) on the Optical Answer Sheet. All diagrams are not drawn to scale. (20 marks)

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1. Which digit in 53.42 is in the tenths place?

   (1) 5

   (2) 2

   (3) 3

   (4) 4

---

2. Which one of the following is the same as 3920 cm?

   (1) 3 m 92 cm

   (2) 3 m 920 cm

   (3) 39 m 20 cm

   (4) 39 m 200 cm

---

3. What is the value of $6240 \div 60$?

   (1) 104

   (2) 140

   (3) 1004

   (4) 1040

---

4. There are 21 apples, 15 oranges and 12 pears in a box. What is the ratio of the number of apples to the number of oranges to the number of pears? Express your answer in its simplest form.

   (1) 4 : 5 : 7

   (2) 7 : 5 : 4

   (3) 12 : 15 : 21

   (4) 21 : 15 : 12

(Go on to the next page)

5. Which of the following numbers is the smallest?

(1) **0.68**

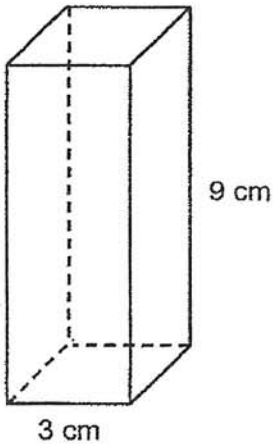
(2) **0.86**

(3) **0.068**

(4) **0.086**

---

6. A solid cuboid of height 9 cm has a square base of side 3 cm.
What is its volume?



(1) 27 cm^3

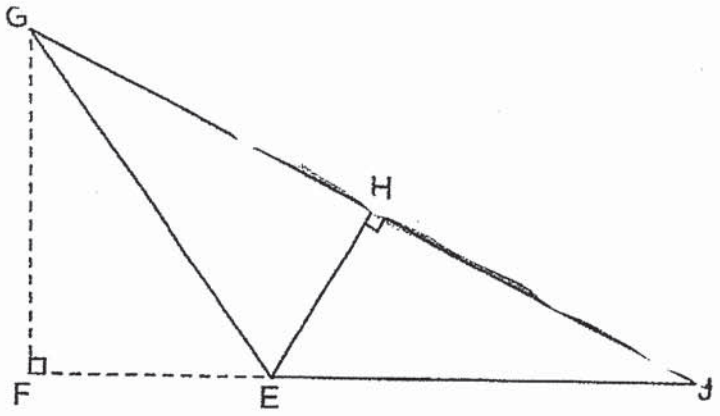
(2) 36 cm^3

(3) 54 cm^3

(4) 81 cm^3

(Go on to the next page)

7. In the figure below, EGJ is a triangle.
Given that GHJ is the base of triangle EGJ, which is the height of triangle EGJ?



(1) EH

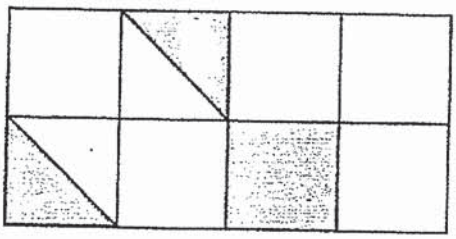
(2) EJ

(3) GE

(4) GF

---

8. The figure below is made up of identical squares. What fraction of the figure is shaded?



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

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

(3) $\frac{4}{11}$

(4) $\frac{12}{16}$

(Go on to the next page)

9. Which of the following is equal to $2\frac{6}{7}$?

(1) $\frac{12}{7}$

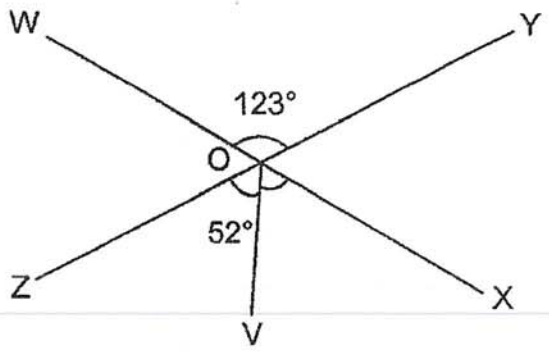
(2) $\frac{19}{7}$

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

(4) $\frac{26}{7}$

---

10. In the figure below, WOX and YOZ are straight lines. $\angle WOY = 123°$ and $\angle ZOV = 52°$. Find $\angle VOX$.



(1) 57°

(2) 71°

(3) 128°

(4) 175°

11. Walter is 6 years old now. His father is 27 years older than him. In how many years' time will Walter's father be four times as old as Walter?

(1) 5

(2) 9

(3) 3

(4) 11

---

12. Arrange the following fractions from the smallest to the largest.

$$\frac{2}{3} \quad \frac{2}{7}, \quad \frac{3}{4}$$

	Smallest		Largest
(1)	$\frac{2}{3}$,	$\frac{3}{4}$,	$\frac{2}{7}$
(2)	$\frac{2}{3}$,	$\frac{2}{7}$,	$\frac{3}{4}$
(3)	$\frac{2}{7}$,	$\frac{3}{4}$,	$\frac{2}{3}$
(4)	$\frac{2}{7}$,	$\frac{2}{3}$,	$\frac{3}{4}$

---

13. Joseph had $300. He spent 40% of his money and saved the rest. How much did he save?

(1) $60

(2) $120

(3) $180

(4) $260

(Go on to the next page)

14. Jade bought 8 m of string. She used $\frac{1}{4}$ of it for some masks and $4\frac{1}{2}$ m for her project. How much string was left?

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

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

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

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

---

15. Which of the following statements are properties of a rhombus?

A	All sides are equal.
B	All angles add up to 180°.
C	Only 1 pair of sides is parallel.
D	Each pair of angles between two parallel sides adds up to 180°.

(1) A and B

(2) A and D

(3) B and C

(4) B and D

END OF BOOKLET A

CATHOLIC HIGH SCHOOL

END-OF-YEAR EXAMINATION (2020)

PRIMARY FIVE

MATHEMATICS

PAPER 1

(BOOKLET B)

Name : _____( )

Class : Primary 5_____

Date : 2 November 2020

Total time for Booklet A and B : 1 hour

15 questions

25 marks

Parent's signature : _____

BOOKLET A	20
BOOKLET B	25
Total Marks	45

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.

Booklet A and B consist of 14 printed pages excluding the cover pages.

Questions **16** to **20** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (5 marks)

Do not write in this space

16. Write two million, three hundred and four thousand and five in numerals.

Ans: _____

17. Find the value of $36 - 4 \times 5 + 7$

Ans: _____

18. Express 8% as a decimal.

Ans: _____

(Go on to the next page)

19. Figure A and B are made up of 1-cm cubes.

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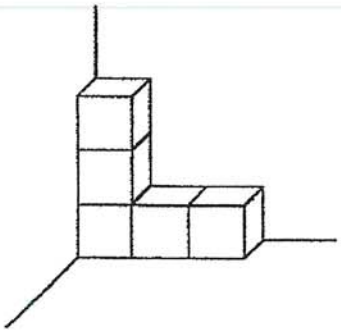

Figure A

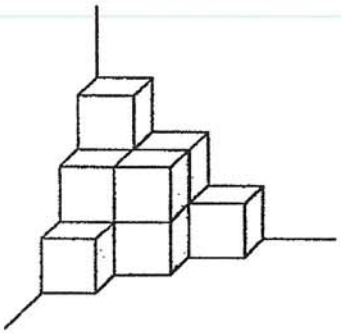

Figure B

How many 1-cm cubes must be added to Figure A to form Figure B?

Ans: _____

20. Cindy had $\frac{5}{8}$ kg of sugar. She used $\frac{1}{3}$ kg **of sugar to bake some tarts.** How much sugar was **used to bake the tarts?**

Ans: _____ kg

Total marks for questions 16 to 20

5

(Go on to the next page)

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. All diagrams are not drawn to scale.

(20 marks)

Do not write in this space

21. Henry spent $\frac{4}{9}$ of his money on books. He had \$64 left.
How much money did he have at first?

Ans: \$_____

22. A ribbon was cut into 2 pieces in the ratio 3 : 7. The difference in length between the 2 pieces was 84 cm. What was the length of the shorter piece of ribbon?

Ans: _____ cm

(Go on to the next page)

23. A rope 9 m long is cut into 6 equal pieces. What is the length of each piece? Give your answer as a mixed number in the simplest form.

Do not write in this space

Ans: _____ _____m

24. Mrs Lim bought 300 identical sets of colour pencils at $1.80 per set. What was the total cost of all the sets of colour pencils?

Ans: $_____

(Go on to the next page)

25. The following solid is made up of 10 cubes. Draw the top view and the side view of the solid.

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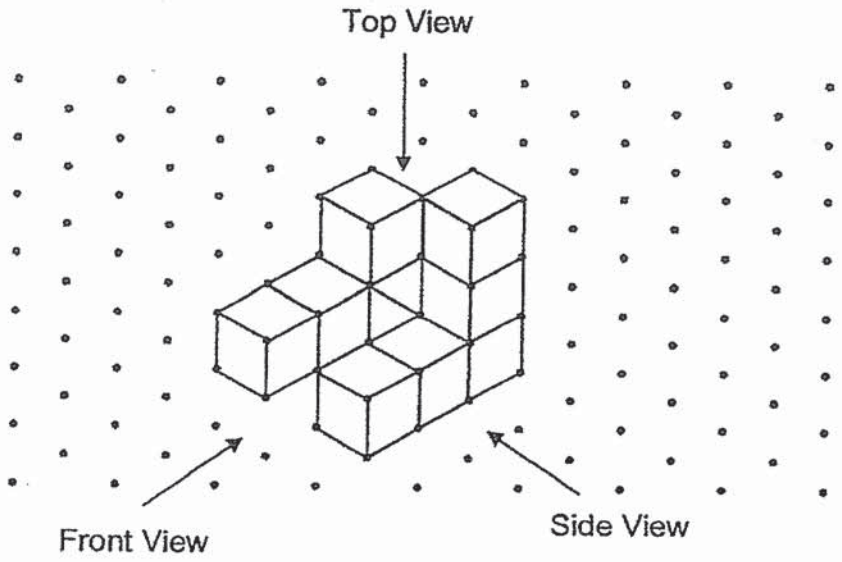
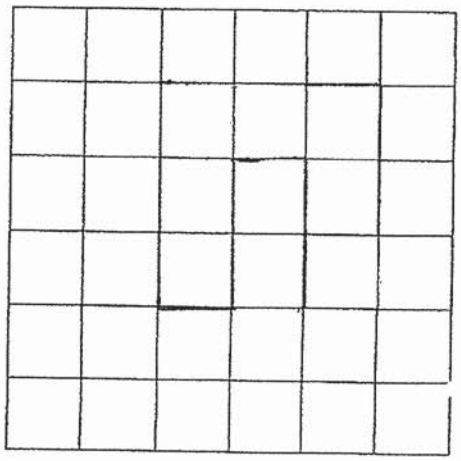
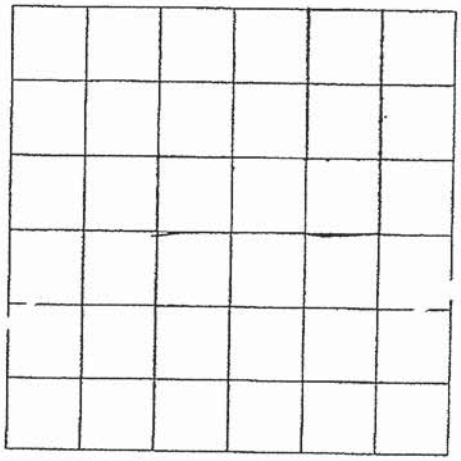


Top View



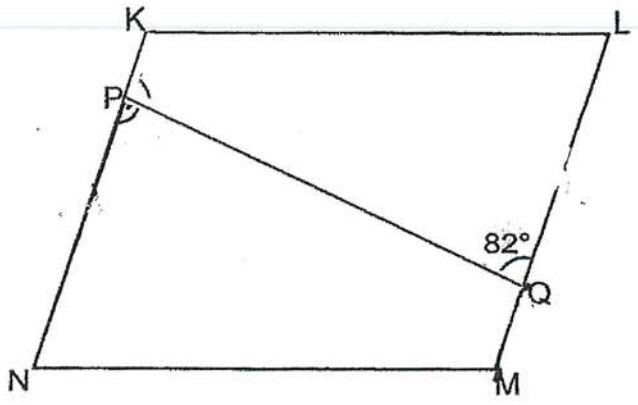
Side View



(Go on to the next page)

26. KLMN is a parallelogram. $\angle LQP = 82°$. Find $\angle KPQ$.

Do not write in this space



Ans: _____ °

27. The price of a bag before GST was $1100. What was the price of the bag including 7% GST?

Ans: $_____

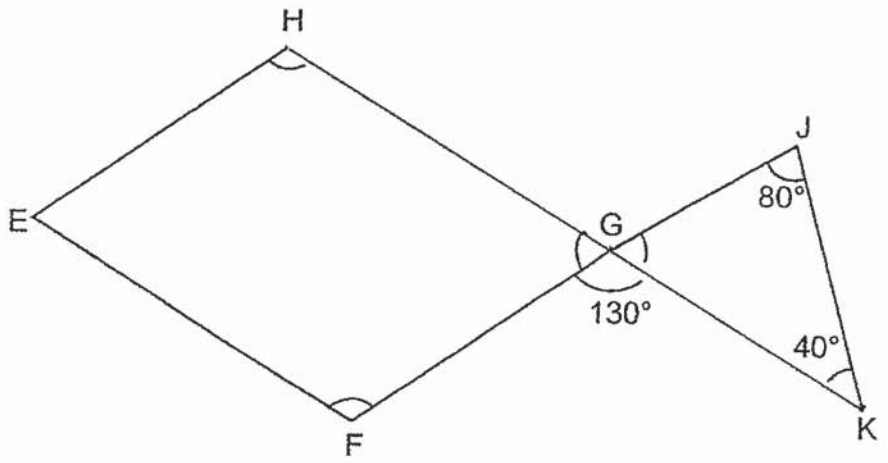
(Go onto the next page)

28. Thomas had 16 more stickers than Zack at first. Thomas gave 23 of his stickers to Zack. In the end, Zack had 4 times as many stickers as Thomas. How many stickers did Thomas have in the end?

Do not write in this space

Ans: _____

29. The figure below is made up of a parallelogram and a triangle. HGK is a straight line. $\angle FGK = 130°$, $\angle GJK = 80°$ and $\angle JKG = 40°$,



The figure above is not drawn to scale. Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a (✓) to indicate your answer.

Statement	True	False	Not possible to tell
(a) $\angle HGF = \angle JGK$			
(b) $\angle EFG = \angle EHG$			

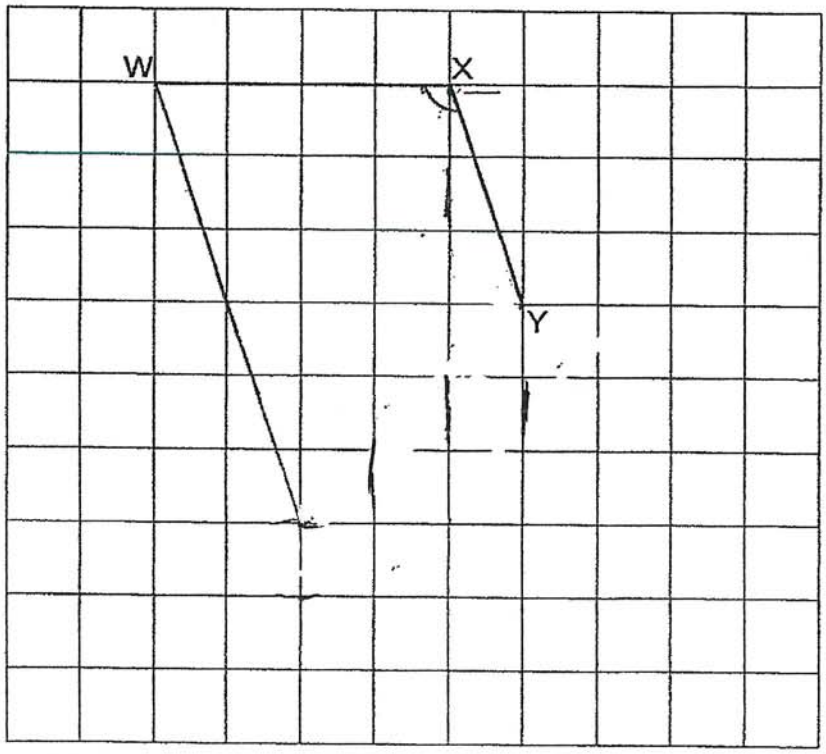
(Go on to the next page)

30. In the square grid below, WX and XY form two sides of Trapezium WXYZ.

(a) Measure ∠WXY.

(b) Complete the drawing of Trapezium WXYZ, where WZ is twice that of XY and WZ is parallel to XY.

Do not write in this space



Ans: (a) _____ °

Total marks for questions 21 to 30

20

END OF BOOKLET B
END OF PAPER 1

CATHOLIC HIGH SCHOOL

END-OF-YEAR EXAMINATION (2020)

PRIMARY FIVE

MATHEMATICS

PAPER 2

Name : _____( )

Class : Primary 5_____

Date : 2 November 2020

Total time : 1 h 30 min

17 questions

55 marks

Parent's signature : _____

PAPER 1 BOOKLET A	20
PAPER 1 BOOKLET B	25
PAPER 2	55
Total Marks	100

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.

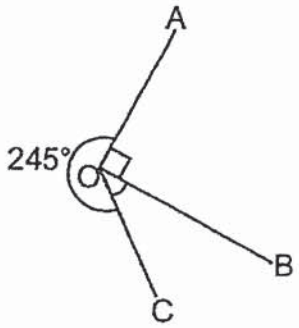
The use of an approved calculator is expected, where appropriate.

This booklet consists of 15 printed pages excluding the cover page.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. (10 marks)

Do not write in this space

1. In the figure below, all the lines meet at Point O. $\angle AOC = 245°$. Find $\angle BOC$.



Ans: _____ °

2. James had $93 500 in his bank account. The bank paid 2% interest at the end of eacn year. How much would James have in his bank account at the end of one year?

Ans: $_____

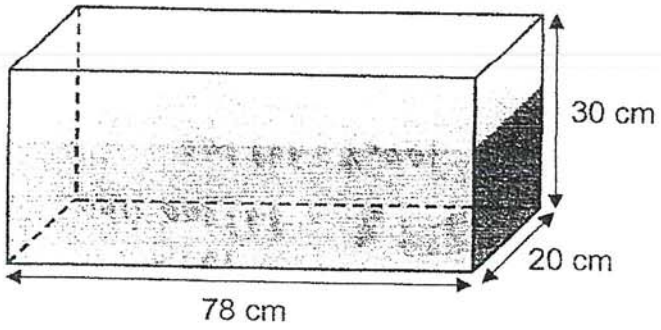
(Go on to the next page)

3. Pins were used to fix a string onto a board. Each pin was placed 30 cm apart from the next one. One pin was placed at the start point and one at the end point of the string. A total of 15 pins were used. What was the length of the string?

Do not write in this space

Ans: _____cm

4. A rectangular container measuring 78 cm by 20 cm by 30 cm is filled with water to $\frac{2}{3}$ of its height. Find the volume of water needed to fill the container to the brim.

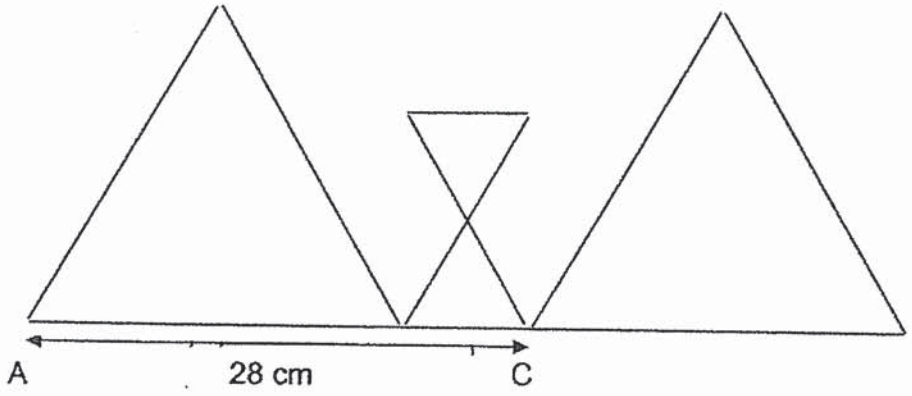


Ans: _____cm^3

(Go on to the next page)

5. A piece of wire is bent to form 2 small identical equilateral triangles and 2 big identical equilateral triangles as shown in the figure below. There is no wire left over. The length of AC is 28 cm. Find the length of the piece of wire.

Do not write in this space



Ans: _____ cm

(Go on to the next page)

For questions **6** to **17**, show your working clearly in the space provided for each question 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. A rectangular piece of paper shown in Figure 1 has a perimeter of 44 cm. 6 such rectangular pieces of paper are arranged to form the shaded area as shown in Figure 2. Find the shaded area in Figure 2.

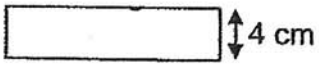


Figure 1

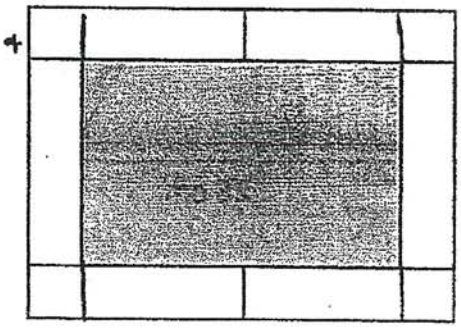


Figure 2

Ans: _____ [3]

(Go on to the next page)

7. Sarah and Tessa had the same number of cupcakes at first. Sarah sold 133 cupcakes and Tessa sold 249 cupcakes. The number of cupcakes Sarah had left was 3 times that of what Tessa had left. How many cupcakes did each of them have at first?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

8. Mrs Lee bought apple tarts, peach tarts, curry buns and butter buns at a shop. The ratio of the number of tarts to the number of buns was 4 : 9. There were twice as many curry buns as butter buns. The ratio of the number of apple tarts to the number of peach tarts was 5 : 7. There were 117 more curry buns than apple tarts. How many tarts and buns did Mrs Lee buy altogether?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

9. John packed 359 cups into large and small boxes. In a large box, he packed 8 cups. In a small box, he packed 5 cups. All the boxes were full and there was no cup left over. He used a total of 58 boxes for packing all the cups. How many large boxes did he use?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

10. Mary Had $486 more than Rachel at first. After each girl spent the same amount of money at a shop, Rachel had $\frac{3}{5}$ of her money left while Mary had $\frac{6}{7}$ of her money left. How much money did they have left altogether?

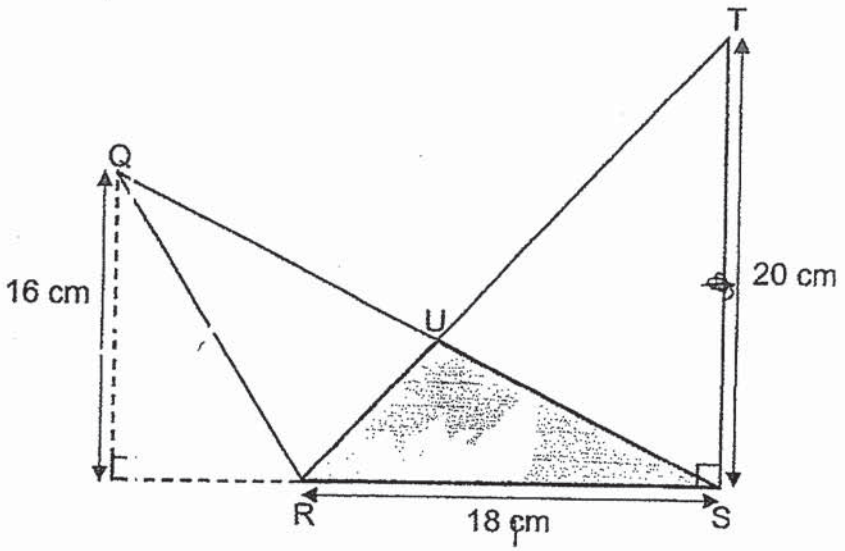
Do not write in this space

Ans: _____ [3]

(Go on to the next page)

11. Figure QRSTU has an area of 253 cm^2. QRS and RST are triangles. Find the area of the shaded part.

Do not write in this space



Ans: _____ [4]

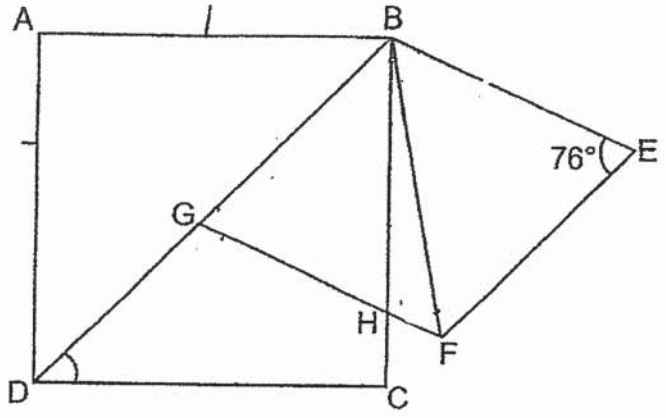
12. Tony spent $\frac{1}{4}$ of his money on 8 notebooks and 40 files. The cost of 4 files was the same as the cost of a notebook. He bought more notebooks with $\frac{1}{2}$ of his remaining money. How many notebooks did Tony buy altogether?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

13. The diagram below shows a square ABCD and a rhombus BEFG. BGD is a straight line. $\angle BEF = 76°$.



(a) Find $\angle BDC$.

(b) Find $\angle HBF$.

Do not write in this space

Ans: (a)_____ [1]

(b)_____ [3]

(Go on to the next page)

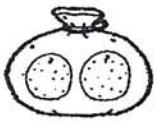
14. At a fruit shop, pears were sold in packets of 3 for $5 while oranges were sold in packets of 2 for $3. Malek bought thrice as many pears as oranges. He paid $221 for the fruits.

Do not write in this space

(a) How many fruits did he buy altogether?

(b) How much more did he spend on pears than oranges?

3 pears for $5



2 oranges for $3

Ans: (a)_____ [3]

(b)_____ [2]

(Go on to the next page)

15. Scott bought 8 adult tickets to an amusement park. Terry bought 3 adult tickets and 7 child tickets to the amusement park. Scott spent $43.50 more than Terry. Each child ticket cost $11.50.

(a) Find the total cost of 7 child tickets.

(b) Find the cost of an adult ticket.

Do not write in this space

Ans: (a) _____ [1]

(b) _____ [3]

(Go on to the next page)

16. Identical triangles and identical squares are used to form a pattern as shown below.

Do not write in this space

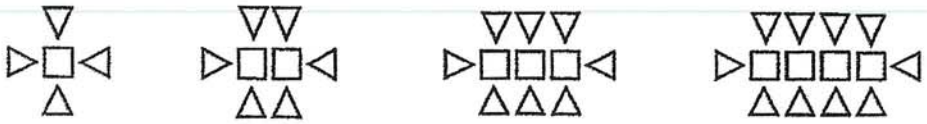


Figure 1 Figure 2 Figure 3 Figure 4

The table shows the number of triangles and squares for the first four figures.

Figure Number	Number of triangles	Number of squares	Total number of triangles and squares
1	4	1	5
2	6	2	8
3	8	3	11
4	10	4	14
5		5	

[2]

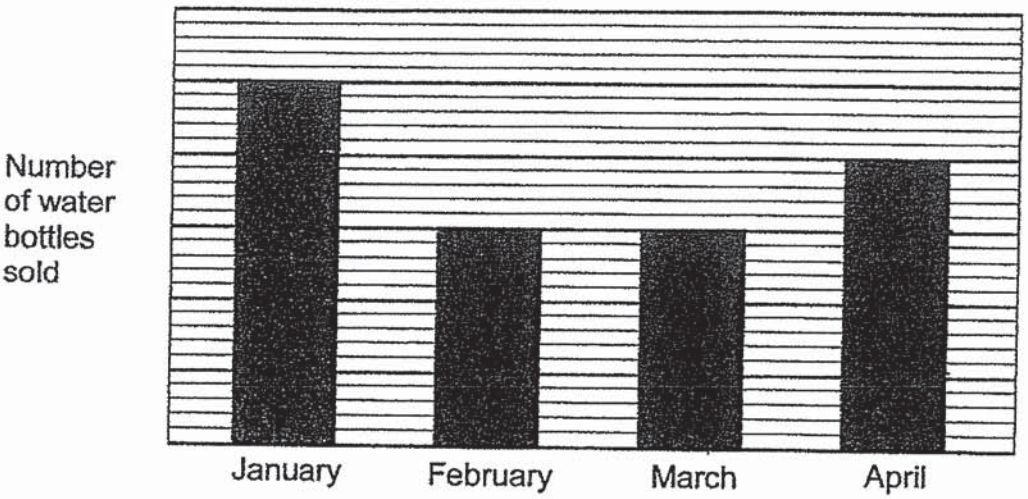
(a) Complete the table for Figure 5.

(b) A figure in the pattern has 58 squares. What is the total number of triangles and squares in that pattern?

Ans. (b)_____ [2]

17. A shopkeeper drew a bar graph to show the number of water bottles sold in his shop from January to April. However, he had forgotten to write the numbers on the scales.

Do not write in this space



(a) From January to April, what percentage of the total number of water bottles sold was sold in February?

(b) $6840 was collected from the sale of water bottles from January to April. The price of each water bottle sold from January to April was different from the ones sold in May. The shopkeeper sold 38 water bottles in May and collected the same amount of money as he did in April. How much was each water bottle sold in May?

Ans: (a)_____ [2]

(b)_____ [3]

END OF PAPER 2

ANSWER KEY

YEAR : 2020
LEVEL : PRIMARY 5
SCHOOL : CATHOLIC HIGH
SUBJECT : MATHEMATICS
TERM : SA2

BOOKLET A

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

BOOKLET B

Q16. 2304005

Q17. (36-20)+7
= 16+7=23

Q18. 8 % = $\frac{8}{100}$ = 0.08

Q19. 11 – 5 = 6

Q20. $\frac{5}{8}$ = $\frac{15}{24}$ - $\frac{8}{24}$ = $\frac{7}{24}$ KG

Q21. $\frac{5}{9}$ = $64

$\frac{1}{9}$ = =$64 ÷ 5 = $12.80

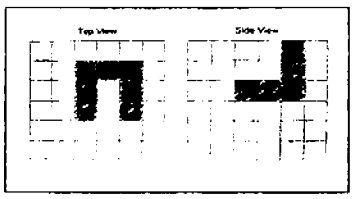
$\frac{9}{9}$ = $12.80 x 9 = $115.20

Q22. 1u = 84 ÷ 4 =21
3u = 3 x 21 = 63cm

Q23. 9m ÷ 6 = $\frac{9}{6}$ = $1\frac{3}{6}$ = $1\frac{1}{2}$

Q24. 300 set = 300 x $1.60
= 3 x 100 x $1.80 = $540

Q25.



Q26. 180 ° - 82 ° =98°

Q27. $1100 ÷ 100 = $11

$11 x 107% = $1177

Q28. 23 – 16 = 7

7 + 16 + 7 = 30

30 = u

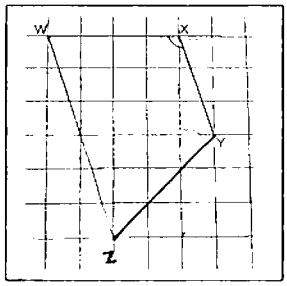
1u = 30 : 3 = 10

Q29 a) False

b) True

Q30 a) 108°c

b)



PAPER 2

Q1. <BOC = 360° - 245° - 90° = 25°

Q2. 100% = $93500

1% = $93500 ÷ 100 = $935

2% = $935 x 2 = $1870

EOY = $93500 + $1810 = $95370

Q3. 15p = 14

14 x 30 = 420cm

Q4. Vol = $\frac{1}{3}$ x 78 x 20 x 30 = 15600cm3

Q5. 28 x 6

= 168

Q6. 2L = 44 – 4 – 4 = 36

1L = 36 ÷ 2 = 18

18 – 14 = 4

L = 14 + 4 = 28

B = 18

Shaded area = 28 x 18 = 504cm2

Q7. 2u = 249 – 133 = 116

1u = 116 ÷ 2 = 58

58 + 249 = 307

Q8. 18u – 5u = 13u

13u = 117

1u = 117 ÷ 13 = 9

39u = 9 x 39 = 351

Q9. 58 x 5 =290

359 – 290 = 69

8 – 5 = 3

69 ÷ 3 = 23

Q10. Rachel Left = $\frac{3}{5}$ Spent = $\frac{2}{5}$ m

= $\frac{2}{5}$ m = $\frac{1}{7}$ x m

= $\frac{2}{14}$ m = $\frac{2}{5}$ m

= 9u = 486

1u = 486 ÷ 9 = 54

$\frac{6}{7}$ m = $\frac{12}{14}$ m (Mary Left)

Left = 3u + 12u = 15u

15 = 15 x 54 = 810

Q11. $\Delta QRS = \frac{1}{2}$ x 18 x 16 = 144

Area RST = $\frac{1}{2}$ x 18 x 20

= 180

253 – 144 = 109

Shaded =180 – 109 = 71cm2

Q12. 40F = 40 ÷ 4 = 10NB

2u = 8NB + 10NB = 18NB

1u = 18 ÷ 2 = 9

3u = 3 x 9u = 27u

$\frac{1}{4}$ = 32u + 40u = 72u

$\frac{3}{4}$ = 72 x 3 = 216

$\frac{3}{6}$ = 216 ÷ 2 = 108

108 ÷ 4 = 27

27 + 8 = 35

Q13 a) $<$BDC = 90 ÷ 2 = 45°

b) $<$BGF = (180-76) ÷ 2

= 104 ÷ 2 =52°

$<$ABF = 52 – 45 = 7°

Q14 a) 1 set +6p = $10 + 2orange =$3

=$13

$221 ÷ 13 = $17

17 x 6 = 102

17 x 2 = 34

102 + 34 = 136

b) P = $17 x 10 = 170

O = $17 x 3 = $51

$170 - $51 = $119

Q15 a) $11.50 x 7 = $80.50

b) 5A = $80.50 + $43.50 = $124

1A = 124 ÷ 5 = $24.80

Q16. 58 = 57 x 2 = 114 tri (a) 12 + 5 = 17

114 + 4 = 118 tri

118 + 58 =176 (b)

Q17 a) $\frac{15}{75} = \frac{1}{5} = \frac{2}{10}$ =20%

b) 456 x 4 =1824

1824 + 38 = 48

END.