



**CATHOLIC HIGH SCHOOL  
END-OF-YEAR EXAMINATION (2022)  
PRIMARY FIVE  
MATHEMATICS  
PAPER 1  
(BOOKLET A)**

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

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

Date : 27 October 2022

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.

This booklet consists of 6 printed 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)

1. Which of the following is four million, twenty-two thousand and twelve in numerals?

- (1) 4 022 012
- (2) 4 022 120
- (3) 4 220 012
- (4) 4 220 120

2. What does the digit 7 in 6.871 stand for?

- (1) 7 ones
- (2) 7 tenths
- (3) 7 hundredths
- (4) 7 thousandths

3. Which of the following is the same as 20 kg 95 g?

- (1) 2095 g
- (2) 2950 g
- (3) 20 095 g
- (4) 20 950 g

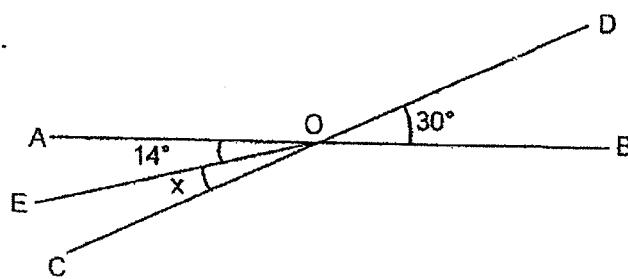
4. Express 0.5 as a percentage.

- (1) 5%
- (2) 50%
- (3) 0.5%
- (4) 0.05%

5. Sammy and Liting have 240 beads. Sammy has 60 beads. What is the ratio of Liting's beads to the total number of beads that Sammy and Liting have?

- (1) 1 : 3
  - (2) 1 : 4
  - (3) 3 : 1
  - (4) 3 : 4
- 

6. Line AOB and line COD are straight lines.  $\angle AOE = 14^\circ$  and  $\angle BOD = 30^\circ$ . Find  $\angle x$ .



- (1)  $14^\circ$
  - (2)  $15^\circ$
  - (3)  $16^\circ$
  - (4)  $30^\circ$
- 

7. Find the value of  $10 \div 2000$ .

- (1) 20
  - (2) 200
  - (3) 0.05
  - (4) 0.005
-

8. The table below shows the marks attained by 3 girls in a test.

Name	Marks
Alice	49
Betty	73
Carol	88

What is the average marks of the 3 girls?

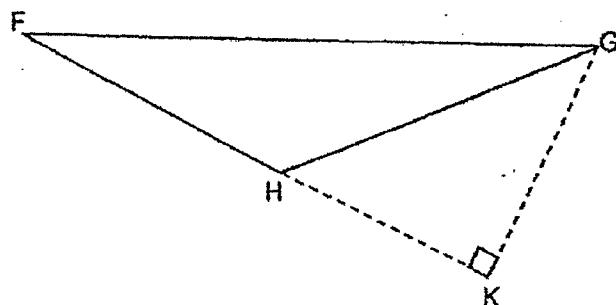
- (1) 61
  - (2) 70
  - (3) 105
  - (4) 210
- 

9. Arrange the following volume in increasing order.

$$12 \text{ t } 4 \text{ ml} , \quad 12\frac{4}{10} \text{ t} , \quad 1240 \text{ ml}$$

- (1) 1240 ml , 12 t 4 ml ,  $12\frac{4}{10}$  t
  - (2)  $12\frac{4}{10}$  t , 12 t 4 ml , 1240 ml
  - (3) 1240 ml ,  $12\frac{4}{10}$  t , 12 t 4 ml
  - (4) 12 t 4 ml , 1240 ml ,  $12\frac{4}{10}$  t
-

10. In the figure below, FH is the base of triangle FGH. Which is the height of triangle FGH?



- (1) FG
  - (2) HG
  - (3) KG
  - (4) HK
- 

11. At a cafe, the ratio of the number of tables to the number of chairs is 3 : 5. There is a total of 120 tables and chairs. How many more chairs than tables are there at the cafe?

- (1) 30
  - (2) 45
  - (3) 75
  - (4) 80
- 

12. Huishan had \$4000 in her bank account. The bank paid 2% interest at the end of each year. She did not withdraw her savings for 1 year. How much did she have in the bank at the end of 1 year?

- (1) \$80
  - (2) \$800
  - (3) \$4080
  - (4) \$4200
-

13. Which of the following is closest to 1?

- (1)  $\frac{3}{4}$
  - (2)  $\frac{3}{5}$
  - (3)  $\frac{5}{3}$
  - (4)  $\frac{7}{6}$
- 

14. Grandma had  $\frac{5}{9}$  kg of sugar. She used  $\frac{1}{4}$  of it to make desserts. How much sugar did she have left?

- (1)  $\frac{3}{4}$  kg
  - (2)  $\frac{5}{12}$  kg
  - (3)  $\frac{5}{36}$  kg
  - (4)  $\frac{11}{36}$  kg
- 

15. The ratio of the perimeter of a square to the perimeter of a rectangle was 3 : 4. The perimeter of the rectangle was 48 cm. Find the length of one side of the square.

- (1) 6 cm
  - (2) 9 cm
  - (3) 12 cm
  - (4) 36 cm
- 

END OF BOOKLET A



**CATHOLIC HIGH SCHOOL**  
**END-OF-YEAR EXAMINATION (2022)**  
**PRIMARY FIVE**  
**MATHEMATICS**  
**PAPER 1**  
**(BOOKLET B)**

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

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

Date : 27 October 2022

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.

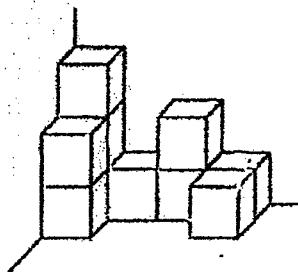
The use of calculators is NOT allowed.

This booklet consists of 8 printed 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. The solid shown below is formed using unit cubes.  
How many unit cubes are used to form the solid?



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

17. Find the value of  $49 - 10 + 7 \times 5$ .

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

18.  $\frac{1}{7}$  kg of butter is needed to bake a cake. How many kilograms of butter is needed to bake 9 such cakes? Leave your answer as a mixed number.

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

19. Express  $5\frac{7}{25}$  as a decimal.

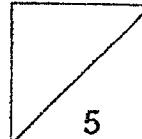
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Ans: \_\_\_\_\_

20. Find the volume of a cube of edge 3 cm.

Ans: \_\_\_\_\_ cm<sup>3</sup>

Total marks for questions 16 to 20



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)

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21. Find the value of  $24 \div 7$ . Give your answer to 2 decimal places.

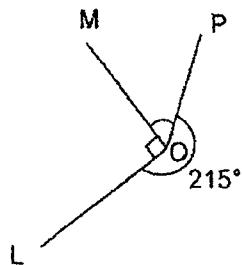
Ans: \_\_\_\_\_

22. What is the missing number in the blank?

$$2 : 5 = \underline{\hspace{2cm}} : 35$$

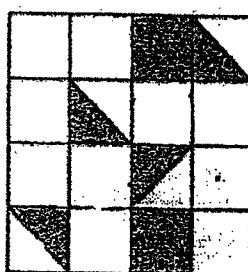
Ans: \_\_\_\_\_

23. In the figure below, all the lines meet at Point O.  $\angle LOP = 215^\circ$ . Find  $\angle MOP$ .



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

24. The following figure is made up of identical squares and triangles.

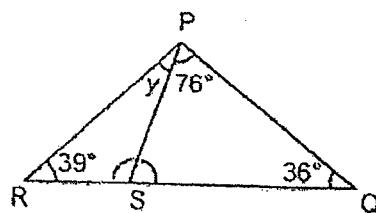


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What percentage of the figure is shaded?

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

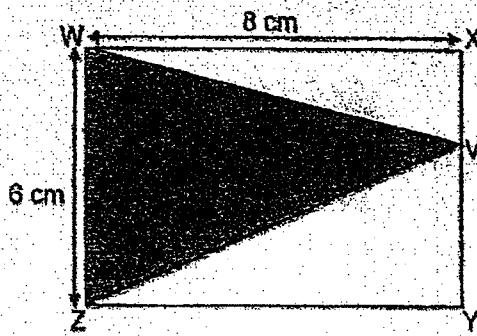
25. PQR is a triangle.  $\angle PQS = 36^\circ$ ,  $\angle SPQ = 76^\circ$  and  $\angle SRP = 39^\circ$ .  
Find  $\angle y$ .



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

26. WXYZ is a rectangle. Point V lies on the line XY. WX is 8 cm and WZ is 6 cm. Find the area of the shaded triangle WVZ.

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

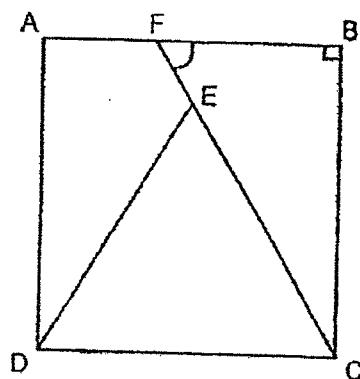
27. The rental rates for a bicycle at a shop are as shown below.

First 2 hours	\$20.00
Every additional $\frac{1}{2}$ hour or less	\$4.50

Dennis rented a bicycle at 8.15 a.m. and returned it at 12.00 noon on the same day. How much would he need to pay for the bicycle rental?

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

28. ABCD is a square and DEC is an equilateral triangle. Find  $\angle CFB$ .



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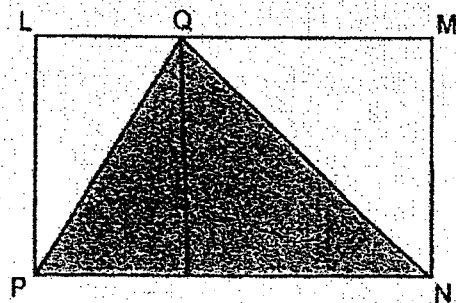
Ans: \_\_\_\_\_

29. The total length of 3 ribbons is 108 cm. The length of ribbon A is 26 cm. Ribbon C is twice the total length of ribbon A and ribbon B. What is the length of ribbon B?

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

30. LMNP is a rectangle. Point Q lies on line LM.

Do not write  
in this space



Each statement below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) in the correct column.

Statement	True	False	Not possible to tell
The ratio of the area of triangle LQP to the area of triangle QMN is 1 : 2.			
Triangle PQN is an obtuse-angled triangle.			

Total marks for questions 21 to 30

END OF BOOKLET B  
END OF PAPER 1

20

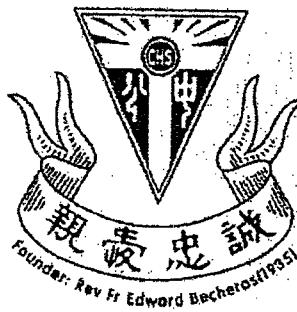
**ANSWER KEY****YEAR : 2022****LEVEL : PRIMARY 5****SCHOOL : CATHOLIC HIGH SCHOOL (Primary)****SUBJECT : MATHEMATICS****TERM : End of Year Paper 1****Booklet A**

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

**Booklet B**

Q16	Ans : 10	Q17	49-10+35=74 Ans : 74
Q18	$\frac{1}{7} \times 9 = \frac{9}{7} = 1\frac{2}{7}$ Ans : $1\frac{2}{7}$	Q19	7×4=28 Ans : 5.28
Q20	3×3×3=27 Ans : 27	Q21	Ans : 3.43
Q22	2×7=14 Ans : 14	Q23	360-215-90=55 Ans : 55
Q24	$\frac{4}{16} \times 100\% = 25\%$ Ans : 25	Q25	180-76-36=68 180-68=112 180-112-39=29 Ans : 29
Q26	$\frac{1}{2} \times 6 \times 8 = 24$ Ans : 24	Q27	20+9+9=38 Ans : 38
Q28	180-30-90=60 Ans : 60	Q29	26+26+26=78 108-78=30 30÷3=10 Ans : 10
Q30	Not possible to tell False		





**CATHOLIC HIGH SCHOOL**  
**END-OF-YEAR EXAMINATION (2022)**  
**PRIMARY FIVE**  
**MATHEMATICS**  
**PAPER 2**

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

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

Date : 27 October 2022

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
<b>Total Marks</b>	<b>100</b>

**INSTRUCTIONS TO CANDIDATES**

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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.

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. A speaker cost \$98 before GST. There was a 7% GST on the speaker.  
What was the cost of the speaker with GST?

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

2. Tim had  $1\frac{2}{3}$  m of rope. He had  $1\frac{5}{9}$  m less rope than Jane. What was the length of rope that Jane had? Leave your answer as a mixed number.

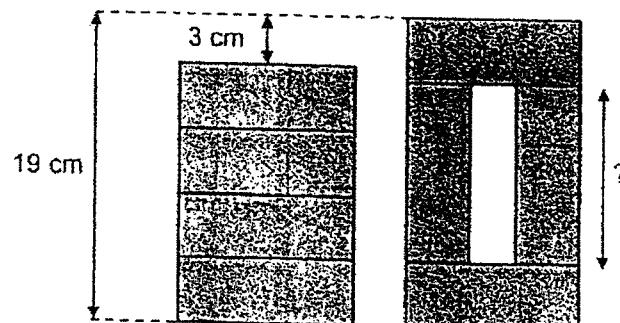
Ans: \_\_\_\_\_ m

3. Amy had \$560 less than Harry. After Harry gave Amy some money, Amy had \$780 more than Harry. How much money did Harry give Amy?

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

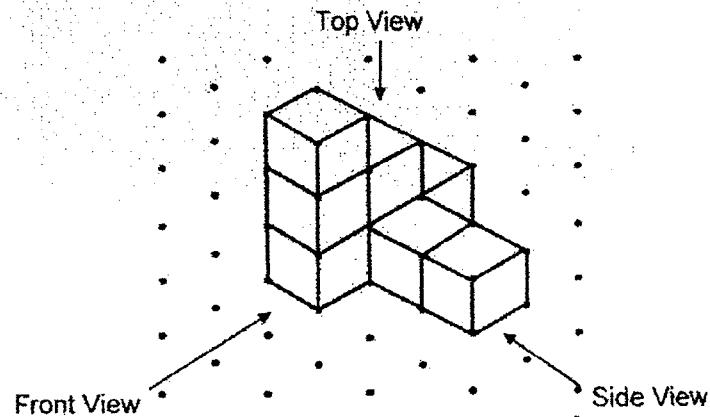
4. The figure below shows 8 identical rectangles arranged differently in 2 stacks. Find the length of a rectangle.



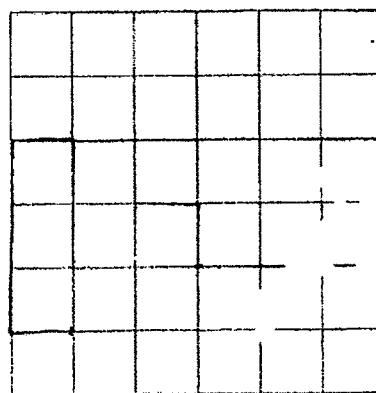
Ans: \_\_\_\_\_ cm

5. The following solid is made up of 8 cubes. Draw the top view and the side view of the solid.

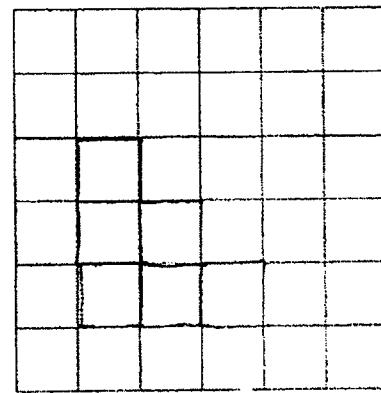
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Top View



Side View



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)

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6. Bakery A and Bakery B baked the same number of buns at first. Bakery A sold 173 buns and Bakery B sold 353 buns. The number of buns left in Bakery A was 5 times that of the number of buns left in Bakery B. How many buns did each bakery bake at first?

Ans: \_\_\_\_\_ [3]



7. A reading survey was conducted with a class of 19 boys and 20 girls. Each boy read the same number of books. Each girl read 4 more books than each boy. The class read a total of 275 books. How many books did each boy read?

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in this space

Ans: \_\_\_\_\_ [3]

8. The usual price of an oven was \$170 and the usual price of a toaster was \$50. During a sale, all items were sold at 30% discount.
- (a) Mrs Lim bought an oven at the sale. How much was the discount?
- (b) Mr Ravi bought a toaster during the sale. How much did he pay for the toaster?

Do not write  
in this space

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [2]

9. Adrian and Bert had a total of \$4563. After Adrian spent  $\frac{1}{4}$  of his money and Bert spent  $\frac{2}{3}$  of his money, they had an equal amount of money left. How much money was Bert left with?

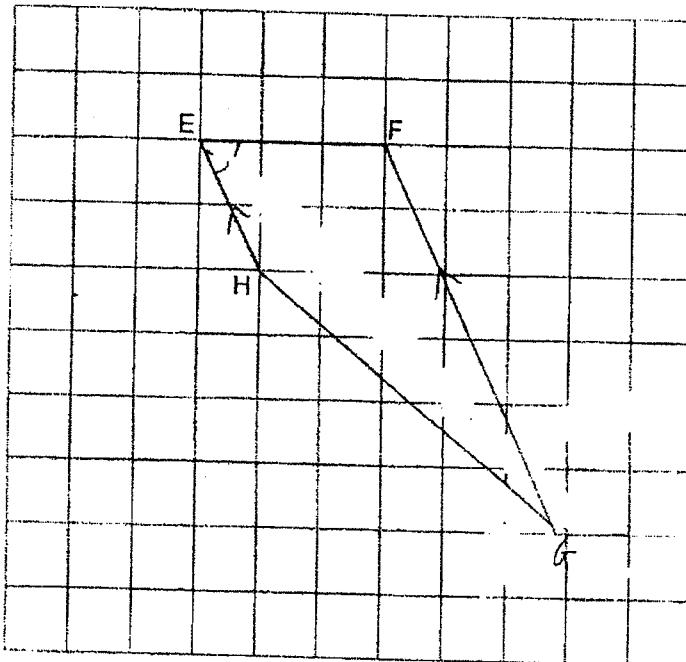
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Ans: \_\_\_\_\_ [3]

10. In the square grid below, EF is one side of trapezium EFGH.

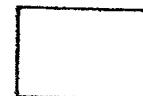
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- (a) Measure and write down the size of  $\angle HEF$ .
- (b) Complete the drawing of trapezium EFGH, where FG is thrice that of EH and FG is parallel to EH.



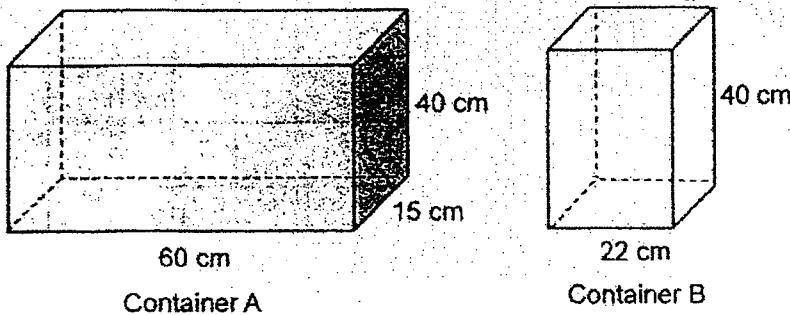
[2]

Ans: (a) \_\_\_\_\_ [1]



11. Container A measures 60 cm by 15 cm by 40 cm. It is filled with water to the brim as shown below. The base of container B is a square of side 22 cm. Its height is 40 cm. Container B is empty at first. Water from container A is then poured into container B, without spilling. After container B is filled to the brim, there is still some water left in container A.

Do not write  
in this space



- (a) What is the capacity of container B? Leave your answer in  $\text{cm}^3$ .  
(b) How much water is left in container A after container B is filled to the brim? Leave your answer in litres.

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [3]

12. Roy bought garlic bread, mashed potatoes and pizzas for a party. The ratio of the number of garlic bread to the number of mashed potatoes to the number of pizzas bought was 2 : 7 : 3. The cost of each garlic bread, mashed potato and pizza was \$2.50, \$3 and \$10.50 respectively. He paid \$690 for all the food items.
- (a) What fraction of the food bought was mashed potatoes?
- (b) How many pizzas did Roy buy?

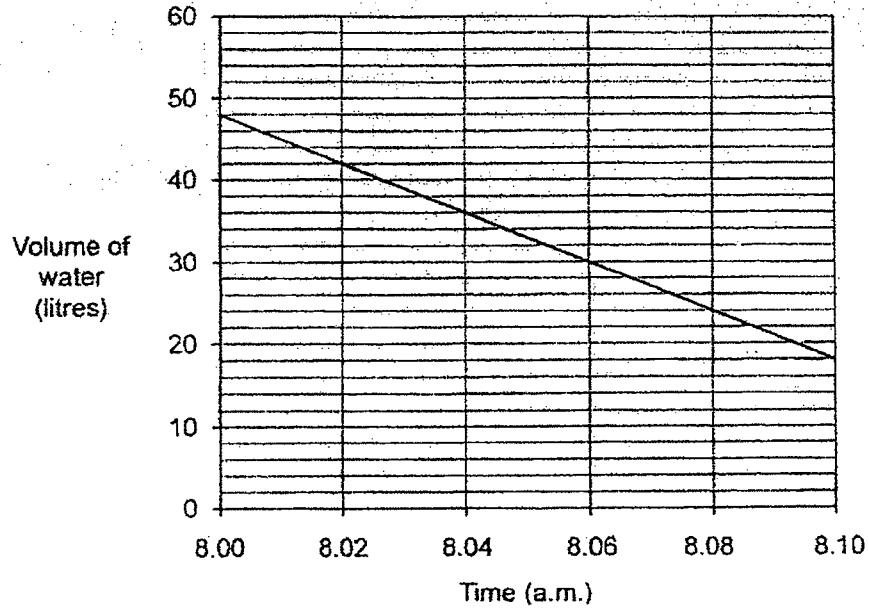
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Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [3]

13. The line graph shows the amount of water that leaked from a tank in 10 minutes from 8.00 a.m. to 8.10 a.m.

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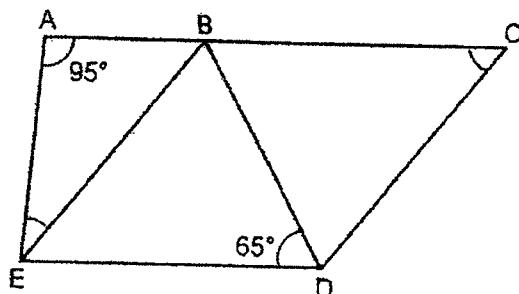
- (a) How much water leaked in 1 min?  
(b) At the rate shown in the graph, how many minutes would it take for the tank to be completely empty after 8.10 a.m.?

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [2]

14. In the figure below, BCDE is a rhombus and ABE is a triangle. ABC is a straight line.  $\angle EAB = 95^\circ$ ,  $\angle BDE = 65^\circ$ .

Do not write  
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- (a) Find  $\angle BCD$ .  
(b) Find  $\angle AEB$ .

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [2]

15. Mrs Lee baked some pies. She gave 20 of them to her neighbours and  $\frac{5}{8}$  of the remaining pies to her friends. She was left with  $\frac{1}{4}$  of the total number of pies. How many pies did Mrs Lee bake?

Do not write  
in this space

Ans: \_\_\_\_\_ [5]

16. Ahmad had 480 marbles. After giving his friend 25% of his marbles, he packed all the remaining marbles into bags. Each bag contained either 6 or 8 marbles. He packed 50 bags in total.

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in this space

- (a) How many marbles were packed into bags?  
(b) How many bags were packed with 8 marbles each?

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [3]

17. The first four figures of a pattern are as shown below.



Figure 1

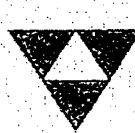


Figure 2

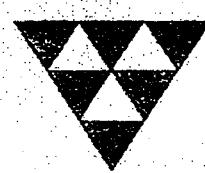


Figure 3

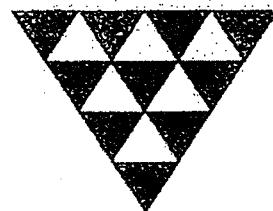


Figure 4

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The table below shows the number of shaded triangles and unshaded triangles used for each figure.

Figure Number	Number of shaded triangles	Number of unshaded triangles	Total number of shaded and unshaded triangles
1	1	0	1
2	3	1	4
3	6	3	9
4	10	6	16
5			25

[2]

- (a) Complete the table for Figure 5.  
 (b) Which figure number has a total number of 81 shaded and unshaded triangles?

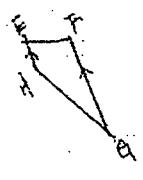
Ans: (b) \_\_\_\_\_ [2]

END OF PAPER 2

### ANSWER KEY

**YEAR : 2022  
 LEVEL : Primary 5  
 SCHOOL : Catholic High School (Primary)  
 SUBJECT : MATHEMATICS  
 TERM : End of Year Examination Paper 2**

**Paper 2**

<b>Q1</b> $\frac{107}{100} \times 98 = 104.86$ Ans : 104.86	<b>Q2</b> $1\frac{6}{9} + 1\frac{5}{9} = 3\frac{2}{9}$ Ans : $3\frac{2}{9}$
<b>Q3</b> $780-560=220$ $220 \div 2=110$ $560+110=670$ Ans : 670	<b>Q4</b> $19-3=16$ $16 \div 4=4$ $19-4-4=11$ Ans : 11
<b>Q5</b> 	<b>Q6</b> $353-173=180$ $180 \div 4=45$ $45+353=398$ Ans : 398
<b>Q7</b> $4 \times 20=80$ $275-80=195$ $195 \div 39=5$ Ans : 5	<b>Q8</b> (a) $\frac{30}{100} \times 170 = 51$ (b) $\frac{30}{100} \times 50 = 15$ $50-15=35$ Ans : (a) \$51 (b) \$35
<b>Q9</b> $4563 \div 13=351$ $351 \times 3=1053$ Ans : \$1053	<b>Q10</b> (a) $64^\circ$  (b)
<b>Q11</b> (a) $22 \times 22 \times 40=19360$ (b) $60 \times 15 \times 40=36000$ $36000-19360=16640$ $16640 \text{ ml}=16.64 \text{ L}$  Ans: (a)19360ml (b) 16.64L	<b>Q12</b> (a) $2+7+3=12$ (b) $(2 \times 2.5)+(7 \times 3)+(3 \times 10.50)$ $=5+21+31.5$ $=57.5$ $690 \div 57.5=12$ $12 \times 3=36$  Ans : (a) $\frac{7}{12}$ (b) 36

<b>Q13</b> (a) $48-18=30$ $30 \div 10=3$ (b) $18 \div 3=6$  Ans : (a) 3L (b) 6min	<b>Q14</b> (a) $180-65-65=50$ (b) $180-95-50=35$  Ans : (a) $50^\circ$ (b) $35^\circ$		
<b>Q15</b> $20 \div 4=5$ $3+9=12$ $12 \times 5=60$   Ans : 60	<b>Q16</b> (a) $\frac{75}{100} \times 480=360$ (b) Assume all are bags of 6, $360 \div 6=60$ $60-50=10$ $10 \times 6=60$ $8-6=2$ $60 \div 2=30$  Ans : (a) 360 (b) 30		
<b>Q17</b> (a) <table border="1" style="margin-left: auto; margin-right: auto; width: fit-content;"> <tr> <td style="padding: 2px;">15</td> <td style="padding: 2px;">10</td> </tr> </table> (b) $9 \times 9=81$  Ans : (b) 81	15	10	
15	10		

3  
EWT