



**AI TONG SCHOOL**  
**2022**  
**END-OF-YEAR EXAMINATION**  
**PRIMARY 5**

**MATHEMATICS**  
**PAPER 1**

**DURATION :** 1 h

**DATE :** 1 NOVEMBER 2022

**INSTRUCTIONS**

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.

**Name:** \_\_\_\_\_ ( b )

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

**Marks:**

|                             |       |
|-----------------------------|-------|
| <b>Parent's Signature :</b> | _____ |
| <b>Date :</b>               | _____ |

|                |           |
|----------------|-----------|
| <b>Paper 1</b> | <b>45</b> |
|----------------|-----------|

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**Paper 1 Booklet A**

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) and shade your answer on the Optical Answer Sheet.  
(20 marks)

---

1 Find the value of  $(100 + 250 \div 10) \times 3$ .

- (1) 105
- (2) 175
- (3) 325
- (4) 375

2 Which of the following numbers when rounded to the nearest hundred becomes 61 400?

- (1) 61 349
- (2) 61 449
- (3) 61 450
- (4) 61 495

3 How many sixths are there in  $4\frac{5}{6}$ ?

- (1) 29
- (2) 26
- (3) 15
- (4) 5

4 Which of the following is not equal to  $\frac{1}{2}$ ?

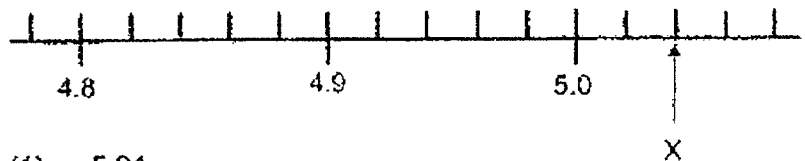
(1)  $\frac{1}{3} + \frac{1}{6}$

(2)  $\frac{1}{4} + \frac{3}{8}$

(3)  $\frac{1}{5} + \frac{3}{10}$

(4)  $\frac{3}{7} + \frac{1}{14}$

5 What is the value of X in the scale below?



(1) 5.04

(2) 5.02

(3) 5.2

(4) 5.4

6 A typist can type 160 words in 5 minutes. At this rate, how long does the typist take to type 320 words?

(1) 10 minutes

(2) 2 minutes

(3) 32 minutes

(4) 64 minutes

- 7 What is the missing number in the  $\square$ ?

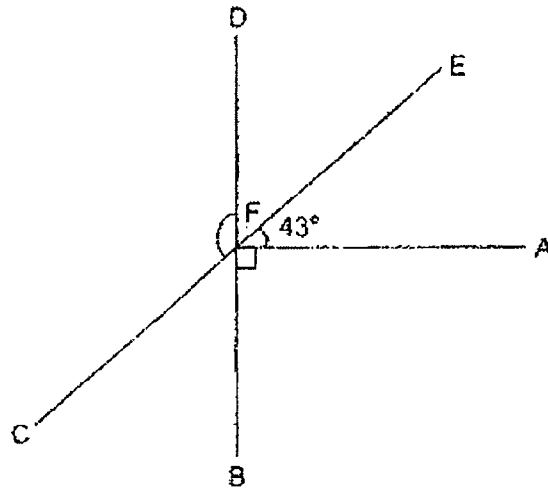
$$7 : \square = 3 : 15$$

- (1) 19
  - (2) 21
  - (3) 24
  - (4) 35
- 8 Four letters P, E, A, and R are shown below. How many of the letters has/have a line of symmetry?

P E A R

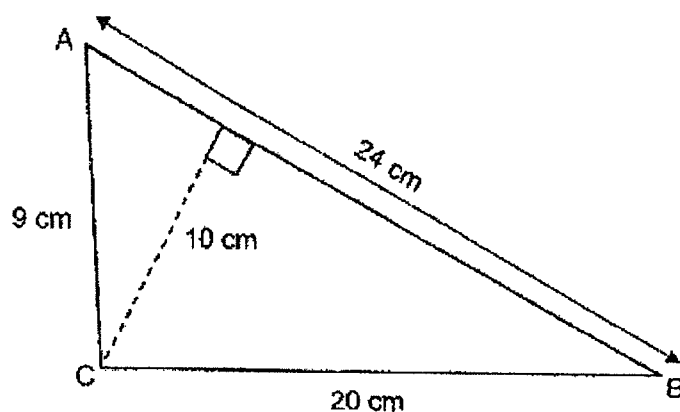
- (1) 1
- (2) 2
- (3) 3
- (4) 4

- 9 In the figure below, AF, BD and CE are straight lines.  
 $\angle AFE = 43^\circ$ .  $\angle AFB$  is a right angle. Find  $\angle CFD$ .



- (1)  $141^\circ$
- (2)  $137^\circ$
- (3)  $133^\circ$
- (4)  $129^\circ$

- 10 What is the area of triangle ABC?



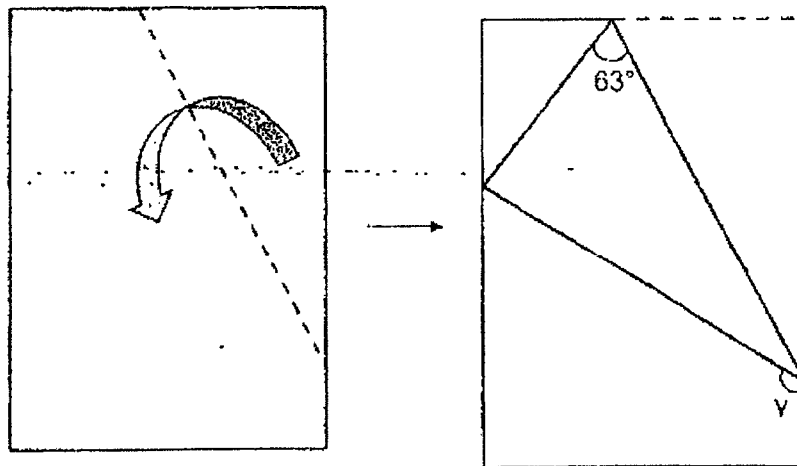
- (1)  $90 \text{ cm}^2$   
(2)  $108 \text{ cm}^2$   
(3)  $120 \text{ cm}^2$   
(4)  $240 \text{ cm}^2$
- 11 The ratio of the cost of an eraser to the cost of a pen is 2 : 5. A ruler costs twice as much as the eraser. What is the ratio of the cost of the ruler to the cost of the eraser to the total cost of the three items?
- (1) 2 : 4 : 5  
(2) 4 : 2 : 5  
(3) 2 : 4 : 11  
(4) 4 : 2 : 11

- 12 The average mass of four boys is 52 kg. The masses of Cameron and James are shown in the table below. Leon and Zach are of the same mass each. What is the total mass of Zach and Cameron?

| Cameron | James | Leon | Zach |
|---------|-------|------|------|
| 42 kg   | 56 kg | ?    | ?    |

- (1) 55 kg  
(2) 92 kg  
(3) 97 kg  
(4) 110 kg

- 13 Jovan had a piece of rectangular paper and folded it along the dotted line as shown below. Find  $\angle y$ .



- (1)  $117^\circ$   
(2)  $126^\circ$   
(3)  $144^\circ$   
(4)  $153^\circ$



14 Which one of the figures below shows that 40% of the figure is shaded?

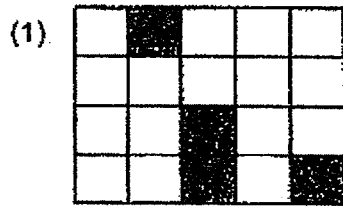


Figure A

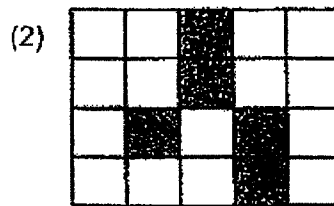


Figure B

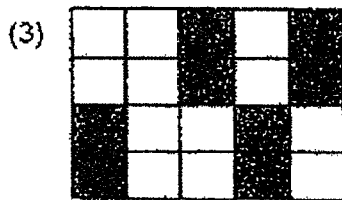


Figure C

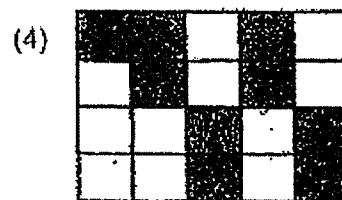
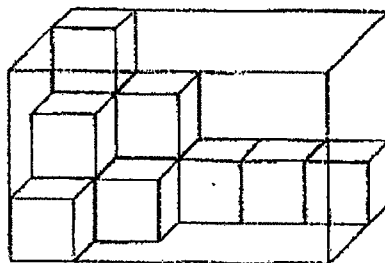


Figure D

- (1) Figure A
- (2) Figure B
- (3) Figure C
- (4) Figure D

15 In the figure below, a rectangular glass box is filled with some 1-cm cubes. What is the volume of the rectangular glass box?



- (1)  $8 \text{ cm}^3$
- (2)  $12 \text{ cm}^3$
- (3)  $33 \text{ cm}^3$
- (4)  $45 \text{ cm}^3$

**Booklet B**

Questions 16 to 20 carry 1 mark each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

16 Express 1.3 t in litres and millilitres.

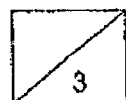
Ans: \_\_\_\_\_ ml

17 Find the value of  $0.32 \times 40$ .

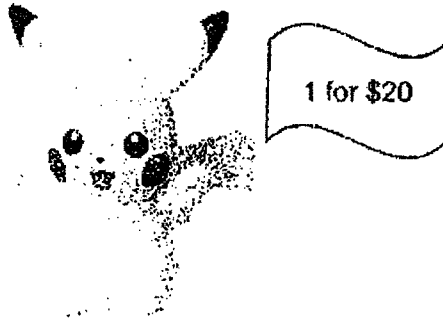
Ans: \_\_\_\_\_

18 Find the value of  $\frac{5}{6} - \frac{4}{9}$ . Give your answer in the simplest form.

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



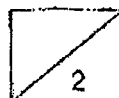
- 19 Mr Muthu bought 1 plush toy. He had to pay 7% GST.  
How much did Mr Muthu pay for the plush toy inclusive of GST?



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

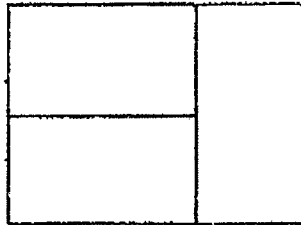
- 20 Express  $\frac{3}{8}$  as a decimal.

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



Questions 21 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

- 21 The figure below is made up of 3 identical rectangles.  
The area of the figure is  $24 \text{ cm}^2$ . What is the perimeter of the figure?



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

- 22 Theo is making some cookies based on this cookie recipe.  
He makes 8 cookies each time.

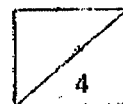
**Mini chocolate cookies**  
(Makes 8 cookies)

- 90 g flour
- 100 g sugar
- 40 g cocoa powder

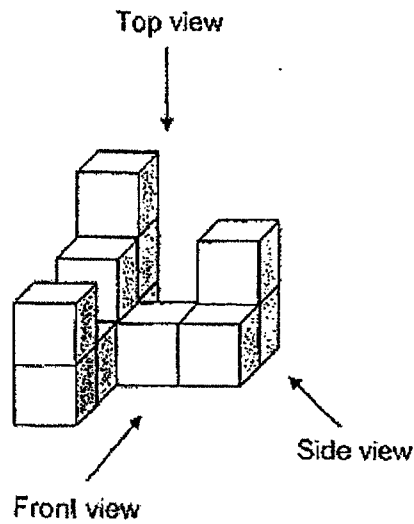


He has 600 g of flour, 420 g of sugar and 280 g of cocoa powder.  
How many cookies can Theo make at most?

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

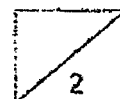


- 23 Joash stacked 12 unit cubes to form the solid below.



Draw the front view and the top view of the solid on the grids below.

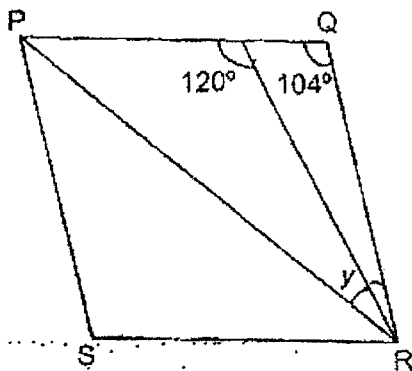
| Front View | Top View  |
|------------|-----------|
| • • • • •  | • • • • • |
| • • • • •  | • • • • • |
| • • • • •  | • • • • • |
| • • • • •  | • • • • • |
| • • • • •  | • • • • • |
| • • • • •  | • • • • • |



- 24 The time Janet spends on her piano, dance and swimming lessons is in the ratio of 5 : 4 : 3. She spends 8 hours on all these enrichment lessons. How much time does she spend on her dance lesson? Leave your answer as a mixed number.

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

- 25 In the figure, PQRS is a rhombus. Find  $\angle y$ .



Ans: \_\_\_\_\_ °



- 26 Mrs Tan baked a cake. She gave  $\frac{1}{3}$  of the cake to Shirley.  
Then she gave  $\frac{1}{6}$  of the remaining cake to Peter.  
What fraction of the cake was Mrs Tan left with?

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

- 27 The table below shows the charges of an inline skates rental shop.

| RENTAL CHARGES                                          |        |
|---------------------------------------------------------|--------|
| For the first 30 minutes                                | \$4    |
| For every subsequent $\frac{1}{2}$ hour or part thereof | \$2.50 |

Elaine and Alicia each rented a pair of inline skates for 3.5 hours.  
How much did they have to pay altogether?

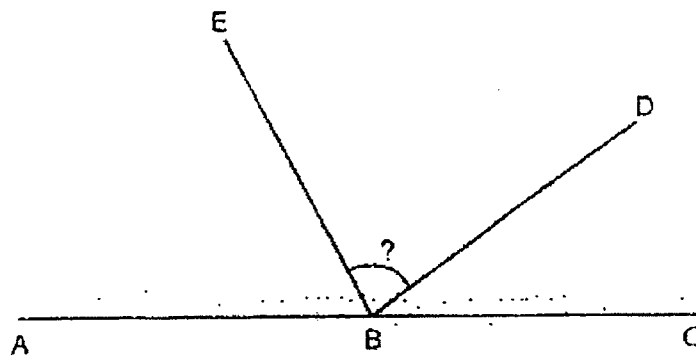
Ans: \$ \_\_\_\_\_



- 28 Deena had 20 fewer stamps than Joey at first. Deena gave 12 of her stamps to Joey. Joey now has 3 times as many stamps as Deena. How many stamps did Deena have at first?

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

- 29 ABC is a straight line.  $\angle ABD$  is  $149^\circ$  and  $\angle EBC$  is  $118^\circ$ . Find  $\angle EBD$ .

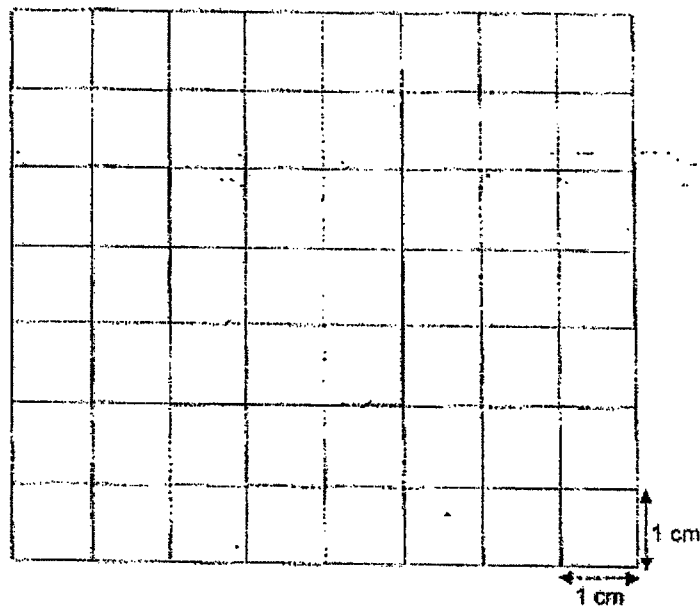
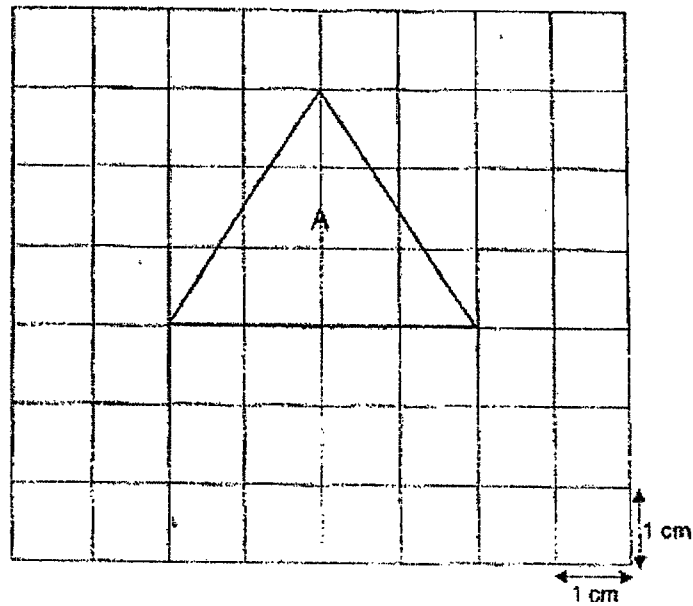


Ans: \_\_\_\_\_°

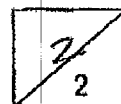




- 30 Two 1-cm grids are shown below. Triangle A is drawn on the grid.  
Draw a right-angled triangle with the same area as triangle A on the second grid below.



End of Paper







**AI TONG SCHOOL**

**2022**

**END-OF-YEAR EXAMINATION**

**PRIMARY 5**

**MATHEMATICS  
PAPER 2**

**DURATION : 1 h 30 min**

**DATE : 1 NOVEMBER 2022**

**INSTRUCTIONS**

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are allowed to use a calculator.

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

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

**Marks:**

|                             |       |
|-----------------------------|-------|
| <b>Parent's Signature :</b> | _____ |
| <b>Date :</b>               | _____ |

|         |     |
|---------|-----|
| Paper 1 | 45  |
| Paper 2 | 55  |
| Total   | 100 |

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**Paper 2**

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

- 1 Patricia has 0.35 kg of flour. Mary has 0.68 kg more flour than Patricia. How much flour do they have altogether?

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

- 2 After Patrick spent \$6 on a meal, he had \$24 left. What percentage of his money did he spend?

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

- 3 Mdm Koh paid \$266 for 8 swimming lessons. She paid the same amount for each lesson. At this rate, how much would she need to pay for 6 lessons only?

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



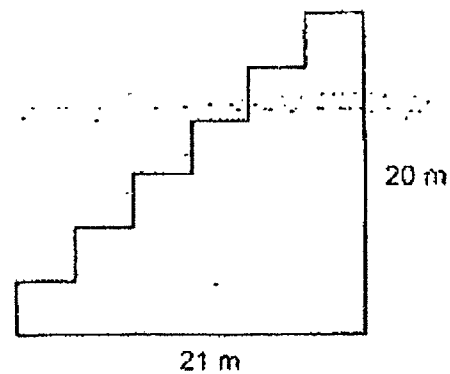
- 4 A shop opens daily for the time shown in the table below.

| Opening hours       |
|---------------------|
| 8.30 am to 12.30 pm |
| 2 pm to 4.45 pm     |
| 5.30 pm to 9 pm     |

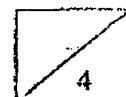
How many hours and minutes is the shop open each day?

Ans: \_\_\_\_\_ h \_\_\_\_\_ min

- 5 In the figure below, all lines meet at the right angles.  
What is the perimeter of the figure below?



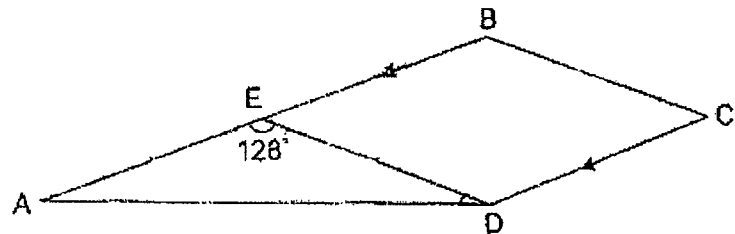
Ans: \_\_\_\_\_ m



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

(45 marks)

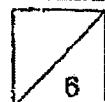
- 6 In the figure, ABCD is a trapezium and BCDE is a rhombus.  
 $AE = ED$ .  $\angle AED = 128^\circ$ . Find  $\angle ADC$ .



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

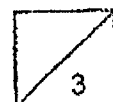
- 7 A wooden plank is sawed into two parts.  
 The first part is 3.75 m long. It is 1.38 m longer than the second part.  
 How long was the wooden plank before it was sawed?

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



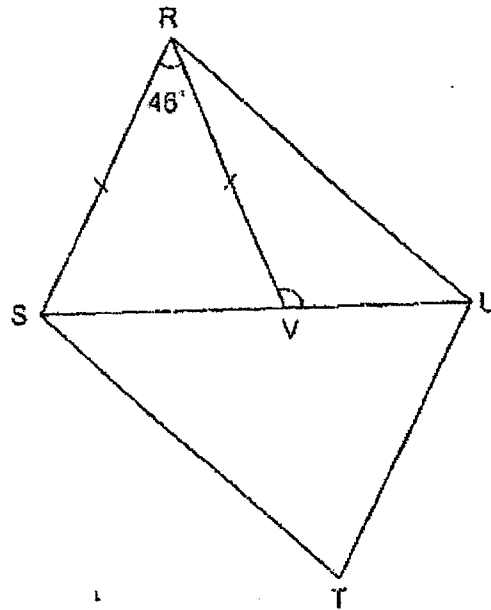
- 8 There were 147 children and some adults at a carnival.  
 $\frac{2}{3}$  of the adults were men and the rest were women.  $\frac{2}{9}$  of the people at the carnival were women. How many people were at the carnival?

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





- 9 In the figure below, RSTU is a parallelogram.  
RS = RV and  $\angle SRV = 46^\circ$ .

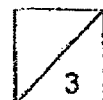


- (a) Name an angle that has the same size as  $\angle STU$ .

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

- (b) Find  $\angle RVU$ .

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



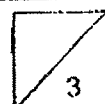
10 David used 60 blue tiles, 48 red tiles and 24 green tiles to design a project.

- (a) Find the ratio of the number of blue tiles to the number of red tiles to the total number of tiles that he used for the project.  
Give your answer in its simplest form.

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

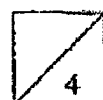
- (b) David designed another project using blue, red and green tiles in the same ratio as above. He used a total of 792 tiles.  
How many green tiles did he use?

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

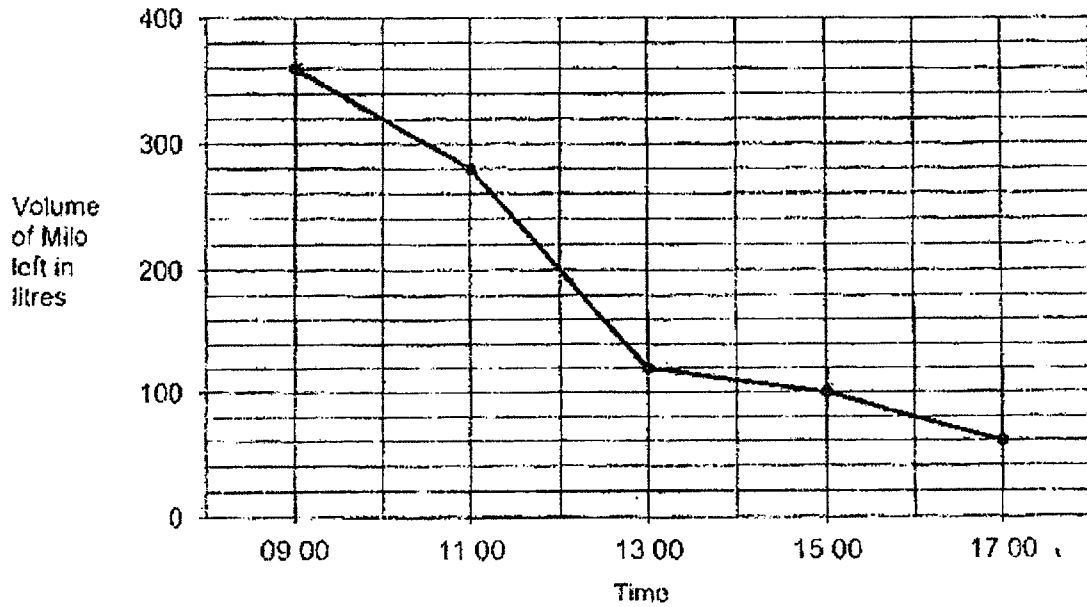


- 11 Aisha, Belle and Carl baked an average of 126 cupcakes.
- Aisha and Belle baked an average of 126 cupcakes.
  - Belle and Carl baked an average of 115 cupcakes.
- How many cupcakes did Belle bake?

Ans: \_\_\_\_\_ [4]



- 12 At a Sports carnival, cups of Milo were distributed from a Milo van to students. The line graph shows the volume of Milo left in the Milo van at different times of the day.



- (a) During which two-hour interval was the decrease in the volume of Milo the greatest?

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

- (b) How many litres of Milo was distributed from 09 00 to 17 00?

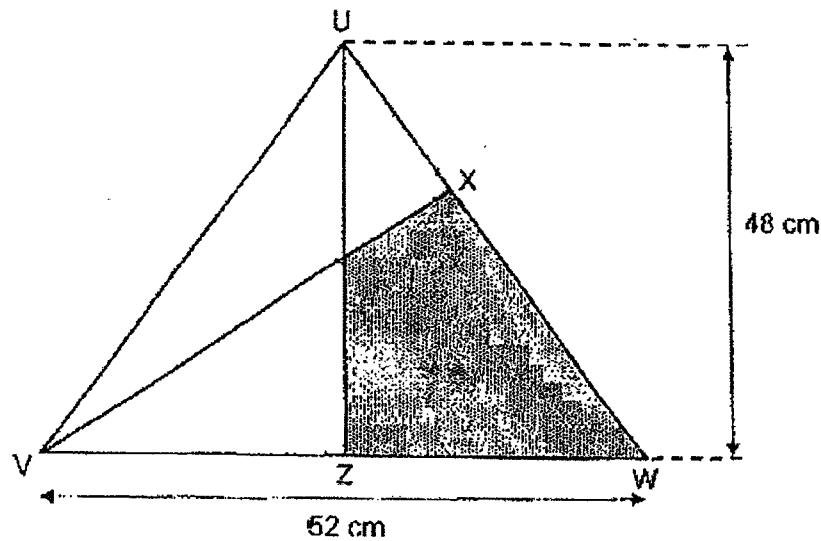
Ans : (b) \_\_\_\_\_ [2]

- (c) The volume of each cup of Milo distributed was 120 ml. How many cups of Milo were distributed from 09 00 to 17 00?

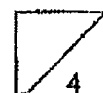
Ans : (c) \_\_\_\_\_ [1]



- 13 In the diagram,  $UVW$  is a triangle.  $VYX$  and  $UYZ$  are straight lines.  $Y$  is the mid-point of  $UZ$  and  $Z$  is the mid-point of  $VW$ .  $WX$  is twice as long as  $UX$ .  $UZ$  is 48 cm and  $VW$  is 52 cm. What is the area of the shaded part  $WXYZ$ ?

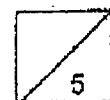


Ans: \_\_\_\_\_ [4]



- 14 Alice, Brenda, Charles and David shared a box of cards. David took  $\frac{2}{5}$  of the cards from the box. Charles took  $\frac{3}{10}$  of the remaining cards. Brenda took 18 more cards than Charles and Alice took the rest of the cards. Alice had 54 cards. How many cards were there in the box at first?

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



15 Lines are drawn to form figures that follow a pattern.



Figure 1

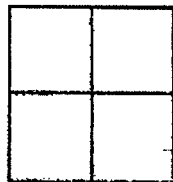


Figure 2



Figure 3

?

Figure 4

| Figure | Number of squares | Number of lines drawn |
|--------|-------------------|-----------------------|
| 1      | 2                 | 7                     |
| 2      | 4                 | 12                    |
| 3      | 6                 | 17                    |
| 4      | 8                 | ?                     |

(a) How many lines are needed to form Figure 4?

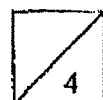
Ans : (a) \_\_\_\_\_ [1]

(b) How many squares are there in Figure 36?

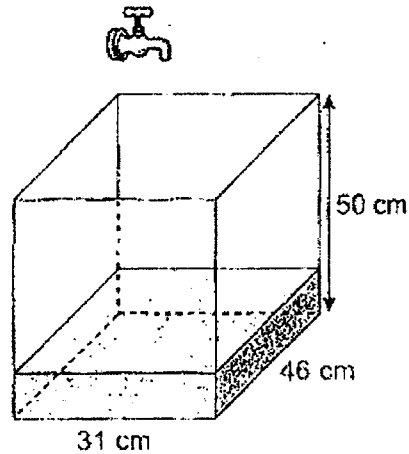
Ans : (b) \_\_\_\_\_ [1]

(c) Which Figure is drawn with 62 lines?

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



- 16 A rectangular tank 31 cm long, 46 cm wide and 50 cm high contained 6.8 ℓ of water at first.

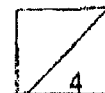


- (a) What is the capacity of the rectangular tank?

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

- (b) The tap was turned on. Water flowed from the tap into the tank at a rate of 3 ℓ per minute. At this rate, how long did it take to fill the tank?

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





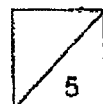
- 17 Marcus bought some books and files for a total of \$192.  
2 books and 1 file cost \$11.20. Each book cost 3 times as much as a file.  
He bought 8 more books than files.

(a) What is the cost of 1 file?

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

(b) How many files did Marcus buy?

Ans : (b) \_\_\_\_\_ [4]





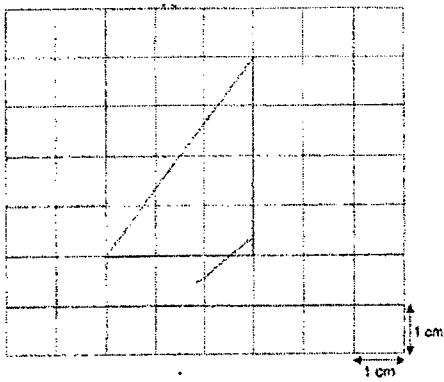
SCHOOL : AI TONG PRIMARY SCHOOL  
 LEVEL : PRIMARY 5  
 SUBJECT : MATHEMATICS  
 TERM : 2022 SA2

**PAPER 1 BOOKLET A**

| Q 1  | Q2  | Q3  | Q4  | Q5  | Q6 | Q7 | Q8 | Q9 | Q10 |
|------|-----|-----|-----|-----|----|----|----|----|-----|
| 4    | 2   | 1   | 2   | 1   | 1  | 4  | 2  | 3  | 3   |
| Q 11 | Q12 | Q13 | Q14 | Q15 |    |    |    |    |     |
| 4    | 3   | 2   | 3   | 4   |    |    |    |    |     |

**PAPER 1 BOOKLET B**

|      |                                                                                                                                                                                        |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q16) | $1\ell\ 300ml$                                                                                                                                                                         |
| Q17) | 12.8                                                                                                                                                                                   |
| Q18) | $\frac{7}{18}$                                                                                                                                                                         |
| Q19) | $20 \div 100 = 0.2$<br>$20 + 0.2 = 20.2$<br>$0.2 \times 7 = 1.4$<br>$20 + 1.4 = \$21.40$                                                                                               |
| Q20) | $125 \times 3 = 0.375$                                                                                                                                                                 |
| Q21) | $24 \div 3 = 8$<br>$4 + 4 + 4 + 4 + 2 + 2 = 20cm$                                                                                                                                      |
| Q22) | $280 \div 40 = 7$<br>$4 \times 8 = 32$                                                                                                                                                 |
| Q23) | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Front View</p> </div> <div style="text-align: center;"> <p>Top View</p> </div> </div> |

|      |                                                                                                                                                    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Q24) | $8 \times 60 = 480$<br>$480 \div 12 = 40$<br>$40 \times 4 = 160$<br>$160 \div 60 = \frac{16}{6}$<br>$= 2\frac{4}{6}$<br>$= 2\frac{2}{3} \text{ h}$ |
| Q25) | $180 - 120 = 60$<br>$180 - 104 - 60 = 16$<br>$180 - 104 = 76$<br>$76 \div 2 = 38$<br>$38 - 16 = 22^\circ$                                          |
| Q26) | $\frac{5}{9}$                                                                                                                                      |
| Q27) | $3 \times 2 = 6$<br>$6 \times 2.5 = 15$<br>$15 + 4 = 19$<br>$19 \times 2 = \$38$                                                                   |
| Q28) | $12 + 12 + 20 = 44$<br>$44 \div 2 = 22$<br>$22 + 12 = 34$                                                                                          |
| Q29) | $149 - 118 = 31$<br>$118 - 31 = 87^\circ$                                                                                                          |
| Q30) |                                                                 |

## PAPER 2

|     |                                      |
|-----|--------------------------------------|
| Q1) | $0.35 + 0.35 + 0.68 = 1.38\text{kg}$ |
|-----|--------------------------------------|

|      |                                                                                                                                    |
|------|------------------------------------------------------------------------------------------------------------------------------------|
| Q2)  | $24 + 6 = 30$<br>$\frac{6}{30} = \frac{1}{5}$<br>$= \frac{20}{100}$<br>$= 20\%$                                                    |
| Q3)  | $266 \div 8 = 33.25$<br>$33.25 \times 6 = \$199.50$                                                                                |
| Q4)  | 10h15min                                                                                                                           |
| Q5)  | $20 + 20 + 21 + 21 = 82m$                                                                                                          |
| Q6)  | $180 - 128 = 52$<br>$52 \div 2 = 26$<br>$180 - 52 = 128$<br>$360 - 128 - 128 = 104$<br>$104 \div 2 = 52$<br>$128 + 26 = 154^\circ$ |
| Q7)  | $3.75 - 1.38 = 2.37$<br>$2.37 + 3.75 = 6.12m$                                                                                      |
| Q8)  | $9u - 2u = 7u$<br>$2u + 2u = 4u$<br>$7u - 4u = 3u$<br>$147 \div 3 = 49$<br>$49 \times 9 = 441$                                     |
| Q9)  | a) $< SRU$<br>b) $180 - 46 = 134$<br>$134 \div 2 = 67$<br>$180 - 67 = 113^\circ$                                                   |
| Q10) | a) 5 : 4 : 11<br>b) 60 : 48 : 24<br>10 : 8 : 4<br>5 : 4 : 2<br>$5 + 4 + 2 = 11$<br>$792 \div 11 = 72$<br>$72 \times 2 = 144$       |
| Q11) | $128 \times 3 = 384$<br>$126 \times 2 = 252$<br>$115 \times 2 = 230$<br>$252 + 230 = 482$<br>$482 - 384 = 98$                      |

|      |                                                                                                                                                                                                                                                                                                        |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q12) | <p>a) 1100 to 1300</p> <p>b) <math>360 - 60 = 300\ell</math></p> <p>c) <math>300 \times 1000 = 300000</math><br/> <math>300000 \div 120 = 2500</math></p>                                                                                                                                              |
| Q13) | <p><math>\frac{1}{2} \times 48 \times 52 = 1248</math></p> <p><math>\frac{1}{2} \times 26 \times 24 = 312</math></p> <p><math>\frac{2}{3} \times 1248 = 832</math><br/> <math>832 - 312 = 520cm^2</math></p>                                                                                           |
| Q14) | <p><math>54 + 18 = 72</math></p> <p><math>72 \div 4 = 18</math></p> <p><math>18 \times 10 = 180</math></p> <p><math>180 \div 3 = 60</math></p> <p><math>60 \times 5 = 300</math></p>                                                                                                                   |
| Q15) | <p>a) <math>17 + 5 = 22</math></p> <p>b) <math>36 \times 2 = 72</math></p> <p>c) <math>62 - 7 = 55</math><br/> <math>55 \div 5 = 11</math><br/> <math>11 + 1 = 12</math></p>                                                                                                                           |
| Q16) | <p>a) <math>31 \times 46 \times 50 = 71300cm^3</math></p> <p>b) <math>71300m\ell = 71.3\ell</math><br/> <math>71.3 - 6.8 = 64.5</math><br/> <math>64.5 \div 3 = 21.5min</math></p>                                                                                                                     |
| Q17) | <p>a) <math>2 \times 3 = 6</math><br/> <math>6 + 1 = 7</math><br/> <math>11.2 \div 7 = \\$1.60</math></p> <p>b) <math>1.6 \times 3 = 4.8</math><br/> <math>4.8 \times 8 = 38.4</math><br/> <math>192 - 38.4 = 153.6</math><br/> <math>1.6 + 4.8 = 6.4</math><br/> <math>153.6 \div 6.4 = 24</math></p> |