



**AI TONG SCHOOL**  
**2024**  
**END-OF-YEAR EXAMINATION**  
**PRIMARY 5**  
**MATHEMATICS**  
**PAPER 1**

**DURATION : 1 h**

**DATE : 24 OCTOBER 2024**

**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:** \_\_\_\_\_ (      )

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

**Marks:**

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

|                |                                                                                                                                                                                                                                                                                                                    |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Paper 1</b> | <div style="border: 1px solid black; height: 100%; position: relative;"> <div style="position: absolute; top: 0; right: 0; bottom: 0; left: 0; border-left: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; bottom: 10px; right: 10px; font-weight: bold;">45</div> </div> |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



**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)

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1 Which of the following is forty-six thousand and fifty in numerals?

- (1) 4650
- (2) 46 050
- (3) 46 500
- (4) 460 050

2 A number becomes 70 000 when rounded to the nearest thousand.  
 Which one of the following could the number be?

- (1) 69 499
- (2) 69 978
- (3) 70 893
- (4) 71 267

3 Which of the following has the same value as  $\frac{2}{3} \times 4$ ?

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

4 Which of the following is equal to  $4\frac{5}{7}$ ?

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

(2)  $\frac{27}{7}$

(3)  $\frac{33}{7}$

(4)  $\frac{39}{7}$

5 What is the value of  $40 + \frac{4}{10} + \frac{4}{100}$ ?

(1) 44.04

(2) 40.44

(3) 40.404

(4) 40.044

6 Arrange the following from the heaviest to the lightest.

7.25 kg

7 kg 55 g

$7\frac{1}{3}$  kg

Heaviest

Lightest

(1)  $7\frac{1}{3}$  kg , 7.25 kg , 7 kg 55 g

(2)  $7\frac{1}{3}$  kg , 7 kg 55 g , 7.25 kg

(3) 7.25 kg ,  $7\frac{1}{3}$  kg , 7 kg 55 g

(4) 7 kg 55 g , 7.25 kg ,  $7\frac{1}{3}$  kg

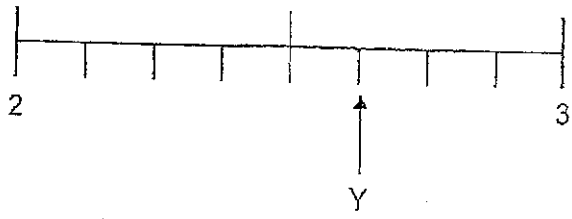
7 In the number line, what is the mixed number represented by Y?

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

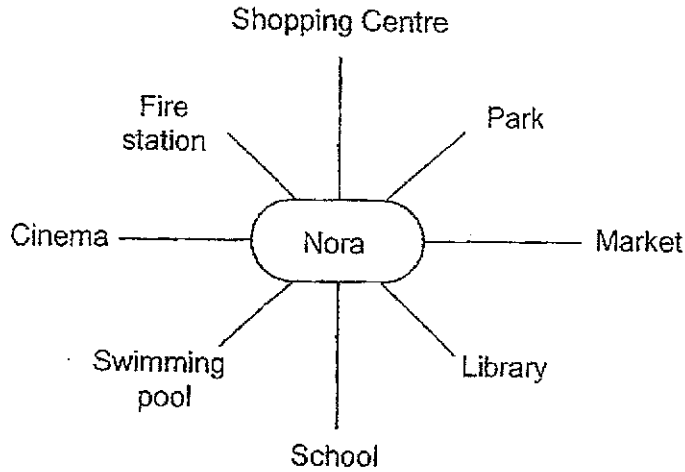
(2)  $2\frac{3}{4}$

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

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



8 Nora is facing the park after she made a  $225^\circ$  turn in a clockwise direction. Which landmark was she facing at first?



(1) Fire station

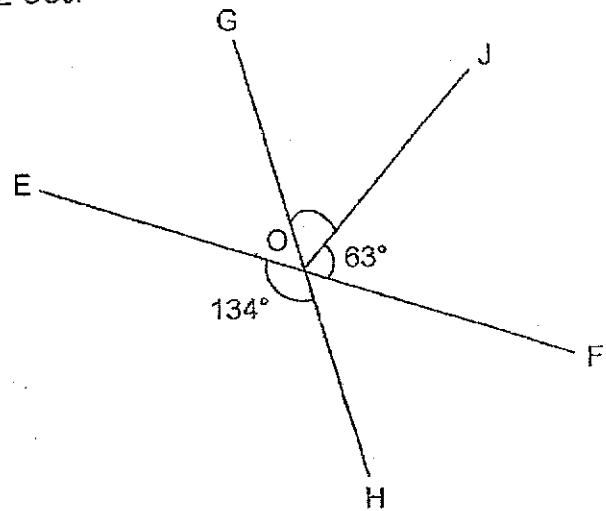
(2) Library

(3) School

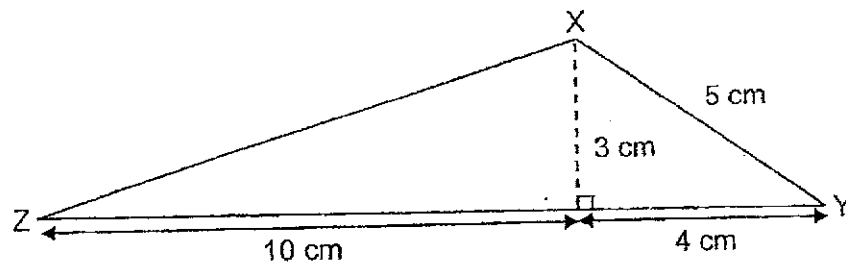
(4) Cinema

- 9 In the figure, EF and GH are straight lines.  
 $\angle EOH = 134^\circ$  and  $\angle JOF = 63^\circ$ . Find  $\angle GOJ$ .

- (1)  $71^\circ$   
 (2)  $67^\circ$   
 (3)  $63^\circ$   
 (4)  $54^\circ$



- 10 What is the area of triangle XYZ?



- (1)  $15 \text{ cm}^2$   
 (2)  $21 \text{ cm}^2$   
 (3)  $25 \text{ cm}^2$   
 (4)  $35 \text{ cm}^2$

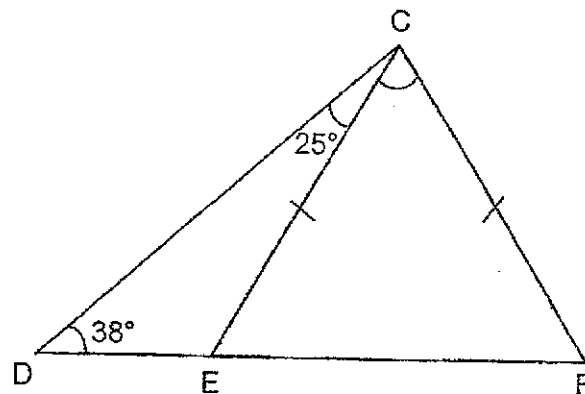
- 11 The sides of a triangle are in the ratio 3 : 4 : 5. The longest side of the triangle is 40 cm. What is the length of the shortest side?

- (1) 12 cm
- (2) 16 cm
- (3) 24 cm
- (4) 32 cm

- 12 The sum of 4 numbers is 960. One of the numbers is 150. What is the average of the other 3 numbers?

- (1) 90
- (2) 170
- (3) 270
- (4) 510

- 13 In the figure, CEF is an isosceles triangle and DEF is a straight line. Find  $\angle FCE$ .

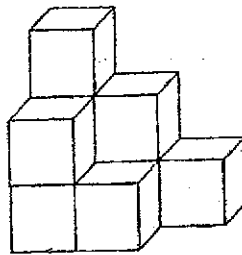


- (1)  $54^\circ$
- (2)  $63^\circ$
- (3)  $65^\circ$
- (4)  $79^\circ$

- 14 Marcus had \$120. He spent \$24.  
What percentage of his money did he spend?

- (1) 20%
- (2) 25%
- (3) 60%
- (4) 80%

- 15 The figure has 9 unit cubes which are glued together to form a solid.



The solid, including the base, is then painted red.  
How many of the 9 cubes have exactly **four** of their faces painted red?

- (1) 5
- (2) 2
- (3) 3
- (4) 4

**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 There were 700 people in a concert hall. 25% of the people left the concert hall during the interval. How many people left the concert hall?

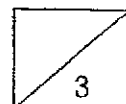
Ans: \_\_\_\_\_

- 17 Find the value of  $376.2 \div 90$ . Express your answer as a decimal.

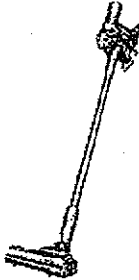
Ans: \_\_\_\_\_

- 18 Find the value of  $16 + 32 \div (2 \times 4)$ .

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



- 19 The usual price of a vacuum cleaner was \$3100. During a sale, it was sold at a discount of 20%. What was the price of the vacuum cleaner during the sale?



**On Sale!**  
Usual Price: \$3100  
Discount: 20%

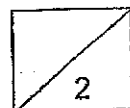
Ans: \$ \_\_\_\_\_

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- 20 9 boys shared 6 pizzas equally.  
What fraction of a pizza did each boy get?  
Express your answer in its simplest form.

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

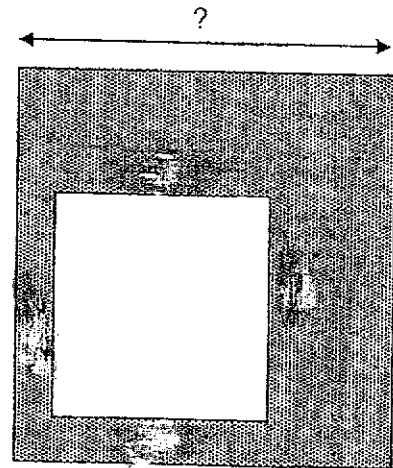
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Questions 21 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

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- 21 The figure is made up of 2 squares.  
 The perimeter of the smaller square is 20 cm.  
 The area of the shaded part is  $39 \text{ cm}^2$ .  
 Find the length of one side of the bigger square.



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

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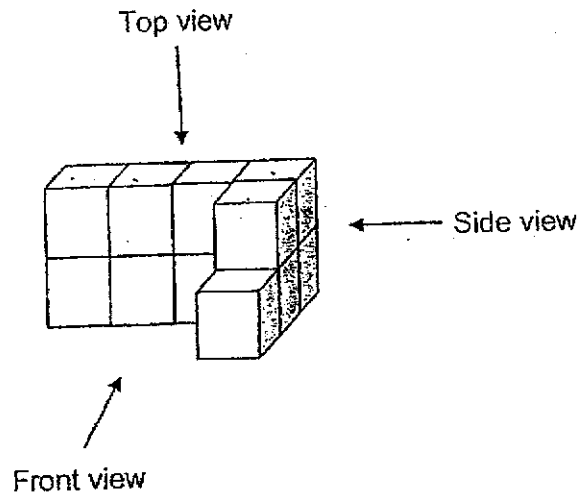
- 22 The ratio of the number of blue pens to the number of green pens is 8 : 3.  
 There are 48 blue pens. Find the total number of pens.

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

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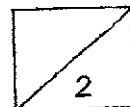


- 23 The solid below is made up of 11 unit cubes.



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

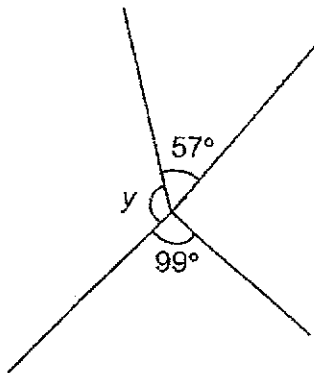
| Front View    | Top View      |
|---------------|---------------|
| • • • • • • • | • • • • • • • |
| • • • • • • • | • • • • • • • |
| • • • • • • • | • • • • • • • |
| • • • • • • • | • • • • • • • |
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| • • • • • • • | • • • • • • • |



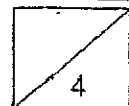
- 24 Mengxuan studied from 10.50 a.m. to 1.35 p.m.  
How much time did Mengxuan spend studying?  
Give your answer in h and min.

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

- 25 In the figure, find  $\angle y$ .



Ans: \_\_\_\_\_  $^\circ$



- 26 A shop baked 120 tarts.  $\frac{3}{4}$  of them were fruit tarts. After some fruit tarts were sold, there were 38 fruit tarts left. How many fruit tarts were sold?

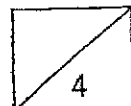
Ans: \_\_\_\_\_

- 27 The table below shows the number of pets each student had in a group. Part of the table is covered by an ink blot. There were 40 students who had at least 2 pets.

| Number of pets     | 0  | 1  | 2  | 3                                                                                     | 4 |
|--------------------|----|----|----|---------------------------------------------------------------------------------------|---|
| Number of students | 15 | 10 | 12 |  |   |

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

| Statement                                                                           | True | False | Not possible to tell |
|-------------------------------------------------------------------------------------|------|-------|----------------------|
| There were 50 students with at least 1 pet.                                         |      |       |                      |
| There were 77 students in the group.                                                |      |       |                      |
| The number of students with 3 pets was equal to the number of students with 4 pets. |      |       |                      |



- 28 Jasper wrote a number on a strip of paper.

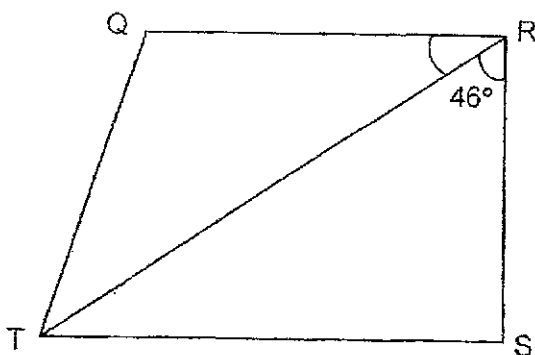
3691847652



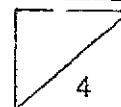
He cut the strip of paper twice and obtained 3 different numbers. He then added the 3 different numbers. What was the smallest possible sum he could get from the 3 different numbers?

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

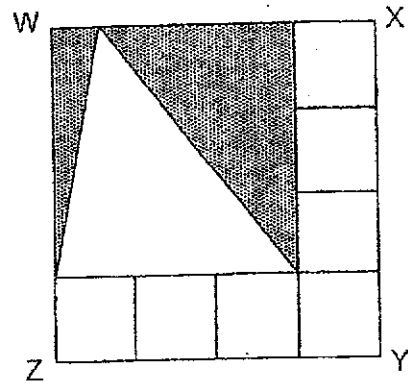
- 29 In the figure, QRST is a trapezium. QR is parallel to TS and  $\angle TRS = 46^\circ$ . Find  $\angle QRT$ .



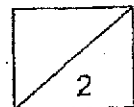
Ans: \_\_\_\_\_°



- 30 A square WXYZ is divided into 7 identical small squares and 3 triangles. The area of each small square is  $16 \text{ cm}^2$ . What is the total area of the shaded triangles?



Ans: \_\_\_\_\_  $\text{cm}^2$



End of Paper 1



**AI TONG SCHOOL**  
**2024**  
**END-OF-YEAR EXAMINATION**  
**PRIMARY 5**

**MATHEMATICS**  
**PAPER 2**

**DURATION : 1 h 30 min**

**DATE : 24 OCTOBER 2024**

**INSTRUCTIONS**

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 allowed.

**Name:** \_\_\_\_\_ (      )

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

**Marks :**

**Parent's Signature :** \_\_\_\_\_

**Date :** \_\_\_\_\_

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

**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)

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- 1 Meiling had 3.75 m of ribbon at first. She used 48 cm of it.  
How many metres of ribbon had she left?

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

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- 2 Mrs Tan bought  $\frac{5}{7}$  kg of onions. She used  $\frac{3}{4}$  of them. How many kilograms of onions did Mrs Tan use?

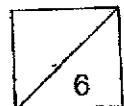
Ans: \_\_\_\_\_ kg

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- 3 A tap takes 3 min to fill 9 identical bottles. At the same rate, how long will it take to fill 153 such bottles?

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

---



- 4 The table below shows the parking charges at a mall.

| PARKING CHARGES                            |        |
|--------------------------------------------|--------|
| First Hour                                 | \$2.50 |
| Every additional half hour or part thereof | \$1.30 |

Josh paid \$9 for parking at the shopping mall. At most, how long did he park his car there?

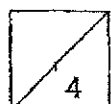
Ans: \_\_\_\_\_ h

- 5 The table shows the number of people who signed up for a cooking class.

| Month            | May | June | July | August |
|------------------|-----|------|------|--------|
| Number of people | 64  | 0    | 82   | 78     |

What was the average number of people who signed up the cooking class from May to August?

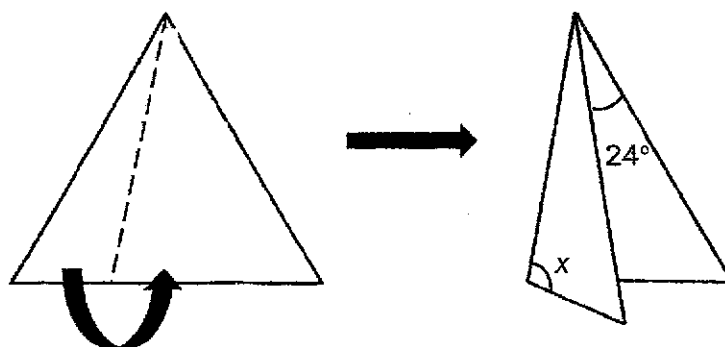
Ans: \_\_\_\_\_



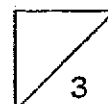
For questions 6 to 17, show your working clearly in the space provided for each question and write the answers in the spaces provided. The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

(45 marks)

- 6 An equilateral triangular piece of paper was folded along the dotted line as shown. Find  $\angle x$ .



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



- 7 The mass of a crate when filled with 50 apples was 15 kg.  
The mass of the same crate when filled with 20 apples was 9 kg.  
What was the mass of the empty crate?

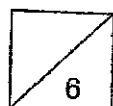
Ans: \_\_\_\_\_ [3]

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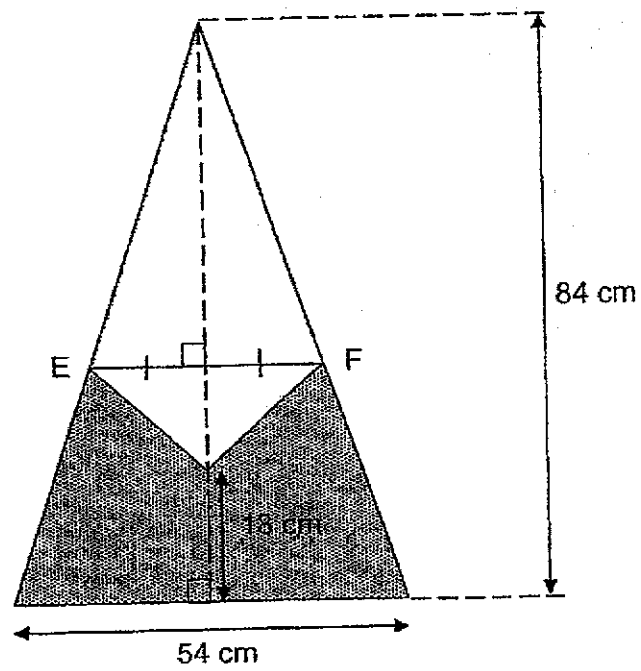
- 8  $\frac{3}{5}$  of Patrick's money is equal to  $\frac{1}{3}$  of Joe's money.  
Patrick has \$2472 less than Joe. How much money do they have altogether?

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

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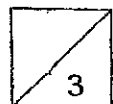
- 9 In the figure below, EF is 34 cm. Find the area of the shaded part.



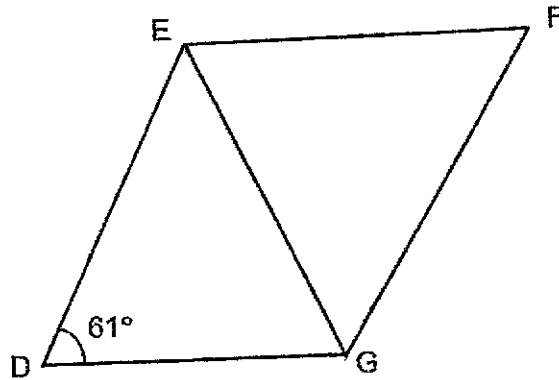
Ans: \_\_\_\_\_ [3]

- 10 At 8 a.m., Machine A started printing stickers.  
Machine B started printing 1 minute later than Machine A.  
For every minute, Machine B printed 30 fewer stickers than Machine A.  
Both machines stopped printing at 8.05 a.m.  
A total of 600 stickers were printed.  
How many stickers did Machine A print?

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



- 11 In the figure,  $DE$  is parallel to  $GF$  and  $DE = EG = EF$ .



- (a) Find  $\angle GEF$ .

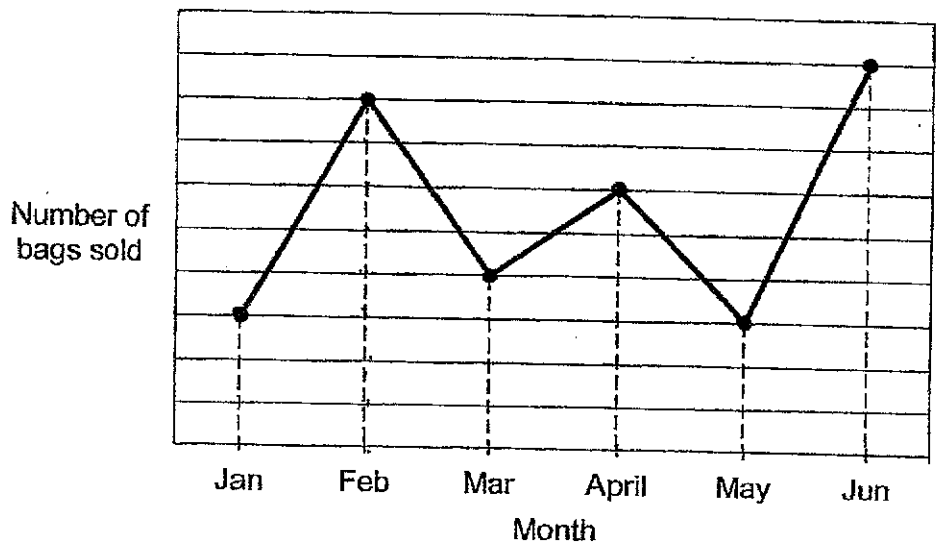
Ans : (a) \_\_\_\_\_ [3]

- (b) Circle the words that describe correctly in the following statement.

DEFG ( is / is not ) a rhombus as it ( is / is not ) made up of 2 identical isosceles triangles.

[1]

- 12 The line graph shows the number of bags sold each month from January to June.



- (a) Between which 2 months was there the greatest increase in the number of bags sold?

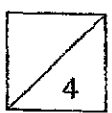
Ans : (a) \_\_\_\_\_ and \_\_\_\_\_ [1]

- (b) In which month was there twice as many bags sold as in March?

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

- (c) 224 bags were sold in February. How many bags were sold in April?

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



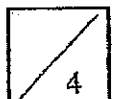
- 13 . A rectangular tank measuring 150 cm by 120 cm by 50 cm was completely filled with water.

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

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

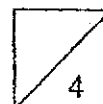
- (b) Sam drained out the water from the tank at a rate of 12 litres per minute. At 11.45 am, Sam found that there were only 420 litres of water left in the tank. At what time would the tank be  $\frac{1}{5}$  full?

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



- 14 Some lamp posts were placed in a straight row at equal distances apart. The distance between the 1<sup>st</sup> and the 6<sup>th</sup> lamp post was 90.5 m. The distance between the 2<sup>nd</sup> and the last lamp post was 307.7 m. How many lamp posts were there altogether?

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



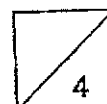
15. Tim had a total of 1648 blue and red paper cranes. He had 132 more blue than red paper cranes. He gave away half of his blue paper cranes and folded more red paper cranes. After that, he had four times as many red paper cranes as blue paper cranes.

(a) How many red paper cranes did Tim have at first?

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

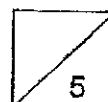
(b) How many more red paper cranes did Tim fold?

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



- 16 Weili spent  $\frac{3}{7}$  of her money on 6 stalks of roses and 6 stalks of tulips. She spent  $\frac{1}{4}$  of her remaining money on 10 stalks of daisies. Each stalk of tulip cost 7 times as much as each stalk of rose. Each stalk of daisy cost \$0.30 more than each stalk of rose. How much did each stalk of tulip cost?

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



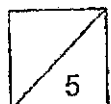
- 17 Esther spent \$558 on 4 similar skirts and 3 similar dresses. She wanted to buy another similar dress but she was short of \$53. In the end, she bought another similar skirt and had \$28 left.

(a) How much more did each dress cost than each skirt?

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

(b) How much money did Esther have at first?

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



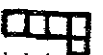
## ANSWER KEY

YEAR : 2024  
 LEVEL : PRIMARY 5  
 SCHOOL : AI TONG  
 SUBJECT : MATHEMATICS  
 TERM : EOY

## BOOKLET A

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

## BOOKLET B

|      |                                                                                                                    |                      |                                                                                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
|------|--------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|----------------------|---|--|--|--|---|--|--|--|---|--|--|
| Q16  | $100\% \rightarrow 700$<br>$1\% \rightarrow \frac{700}{100}$<br>$25\% \rightarrow \frac{700}{100} \times 25 = 175$ | Q17                  | $376.2 \div 9 \div 10 = 41.8 \div 10 = 4.18$                                                                                                                                                                                           |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q18  | $16 + 32 \div 8 = 16 + 4 = 20$                                                                                     | Q19                  | $100\% \rightarrow 3100$<br>$1\% \rightarrow \frac{3100}{100}$<br>$20\% \rightarrow \frac{3100}{100} \times 20 = 620$<br>$3100 - 620 = \$2480$                                                                                         |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q20  | $\frac{6}{9} = \frac{2}{3}$                                                                                        | Q21                  | $20 \div 4 = 5$<br>$39 + 25 = 64$<br>$8 \times 8 = 64\text{cm}$                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q22  | $8u = 48$<br>$1u = 6$<br>$11 = 66$                                                                                 | Q23                  | <div><div>Front View<br/></div><div>Top View<br/></div></div> |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q24  | 2h45min                                                                                                            | Q25                  | $360^\circ - 99^\circ - 90^\circ - 57^\circ = 114^\circ$                                                                                                                                                                               |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q26  | $4u = 120$<br>$1u = 30$<br>$3u = 90$<br>$90 - 38 = 52$                                                             | Q27                  | <table><tr><td>True</td><td>False</td><td>Not possible to tell</td></tr><tr><td>✓</td><td></td><td></td></tr><tr><td></td><td>✓</td><td></td></tr><tr><td></td><td></td><td>✓</td></tr></table>                                        | True | False | Not possible to tell | ✓ |  |  |  | ✓ |  |  |  | ✓ |  |  |
| True | False                                                                                                              | Not possible to tell |                                                                                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| ✓    |                                                                                                                    |                      |                                                                                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
|      | ✓                                                                                                                  |                      |                                                                                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
|      |                                                                                                                    | ✓                    |                                                                                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q28  | $1847 + 652 + 369 = 2868$                                                                                          | Q29                  | $180^\circ - 90^\circ = 90^\circ$<br>$90^\circ - 46^\circ = 44^\circ$                                                                                                                                                                  |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |
| Q30  | $12 \times 12 \times \frac{1}{2} = 72\text{cm}^2$                                                                  |                      |                                                                                                                                                                                                                                        |      |       |                      |   |  |  |  |   |  |  |  |   |  |  |

## PAPER 2

|     |                                                                                                                                                                                                                                        |     |                                                                                                                                            |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------|
| Q1  | $375 - 48 = 327 \text{ cm} = 3.27 \text{ m}$                                                                                                                                                                                           | Q2  | $\frac{3}{4} \times \frac{5}{7} = \frac{15}{28}$                                                                                           |
| Q3  | 9 bottles $\rightarrow$ 3min<br>1 bottles $\rightarrow \frac{3}{9}$<br>153 bottles $\rightarrow \frac{3}{9} \times \frac{153}{1} = 51 \text{ min}$                                                                                     | Q4  | $9 - 2.50 = 6.5$<br>$2.6 + 2.6 = 5.2$<br>$5.2 + 1.3 = 6.5$<br>$3\frac{1}{2} \text{ h}$                                                     |
| Q5  | $64 + 82 + 78 = 224$<br>$224 \div 4 = 56$                                                                                                                                                                                              | Q6  | $60 - 24 = 36$<br>$36 \div 2 = 18$<br>$180 - 60 - 18 = 102$                                                                                |
| Q7  | 30 apples $\rightarrow$ 6kg<br>10 Apples $\rightarrow$ 2kg<br>20 apples $\rightarrow$ 4kg<br>$9 - 4 = 5 \text{ kg}$                                                                                                                    | Q8  | $4u = 2472$<br>$1u = 618$<br>$14u = 618 \times 4 = \$8652$                                                                                 |
| Q9  | $84 - 18 = 66$<br>$\frac{1}{2} \times 54 \times 84 = 2268$<br>$56.1 \times 2 = 1122$<br>$2268 - 1122 = 1146 \text{ cm}^2$                                                                                                              | Q10 | $600 + 120 = 720$<br>$720 \div 9 = 80$<br>$80 \times 5 = 400$                                                                              |
| Q11 | a) $180 - 58 - 58 = 64^\circ$<br>b) not, is not                                                                                                                                                                                        | Q12 | a) MAY and JUNE<br>b) FEB<br>c) $8u = 228$<br>$1u = 28$<br>$6u = 168$                                                                      |
| Q13 | a) $150 \times 120 \times 50 = 900000 \text{ cm}^3$<br>b) $5u = 900000$<br>$1u = 180000$<br>$\frac{1}{5} \times 900000 = 180000$<br>$420000 - 180000 =$<br>$240000$<br>$240000 \div 1000 = 240$<br>$240 \div 12 = 20$<br>ANS : 12.05pm | Q14 | $1u = 90.5 \div 5 = 18.1$<br>$307.7 \div 18 = 17$<br>$17 + 2 = 19$                                                                         |
| Q15 | a) $1648 + 132 = 1516$<br>$1516 \div 2 = 758$<br>b) $1648 - 758 = 890$<br>$890 \div 2 = 445$<br>$445 \times 4 = 1780$<br>$1780 - 758 = 1022$                                                                                           | Q16 | $6 \times 7 = 42$<br>$48 \div 3 = 16$<br>$\$0.30 \times 10 = \$3$<br>$\$3 \div 6 = \$0.50$ (1 rose)<br>$\$0.50 \times 7 = \$3.5$ (1 tulip) |
| Q17 | a) $53 + 28 = \$81$<br>b) $81 \times 3 = 243$<br>$558 - 243 = 315$<br>$315 \div 7 = 45$<br>$558 + 45 + 28 = \$631$                                                                                                                     |     |                                                                                                                                            |