



## RAPHA EXAMINATIONS BOARD

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**P.6 END OF TERM ONE EXAMINATIONS 2024**

**MATHEMATICS**

**Time allowed: 2 hours 30 minutes**

**Pupil's name:** .....

**Signature:** ..... **Date** .....

**School name:** .....

**District:** .....

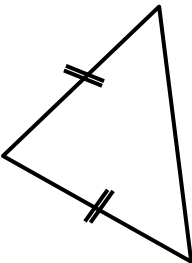
### **READ THE FOLLOWING INSTRUCTIONS CAREFULLY:**

1. This paper has two sections **A** and **B**
2. All the working in both sections **A** and **B** should be shown in the spaces provided
3. All working must be done using blue or black ball point pen or fountain pen. Diagrams **MUST** be drawn in pencil
4. Unnecessary changes of work may lead to loss of marks
5. Any handwriting that cannot be easily read may lead to loss of marks
6. Do not fill in anything indicated for *examiners use only* and those inside the paper

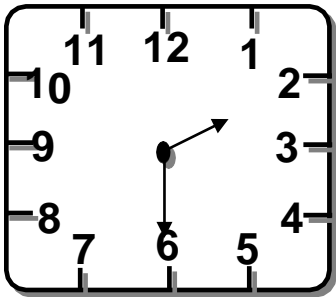
#### **For examiner's use only**

<b>SECTION</b>	<b>MARKS</b>	<b>INITIALS</b>
<b>SECTION A</b>		
<b>SECTION B</b>		
<b>TOTAL</b>		

**(SECTION A. (40 MARKS))**

1	Work out: $68 + 12$ . (02 marks)	2	If $A = \{ a, e, i, o, u \}$ and $B = \{4, 5, 6, 7, 8\}$ , describe set A and B. (02 marks)
3	Write <b>649</b> in Roman numerals. (02 marks)	4	Find the square root of <b>400</b> . (02 marks)
5	A woman had $\frac{4}{5}$ kg of sugar in her tin She used a quarter of it. Find how much sugar she was left with.	6	Arrange in ascending order: $-6, -2, -4, 0, -1$ . (02 marks)
7	Calculate the average of <b>4, 0, and 23</b> . (02 marks)	8	How many lines of folding symmetry has the figure? (02 marks) 

9	A lesson starts at 7: 30am and ends at 8:20am .For how long does it last? (02 marks)	10	Express 3½ kg in grammes. (02 marks)
11	If $3x + 4 = 19$ , find the value of x. (02 marks)	12	Given that set $R = \{ \emptyset \}$ , list all the subsets of R. (02 marks)
13	Write 92,440 in words. (02 marks)	14	Find the GCF of 16 and 20. (02 marks)
15	Work out: $\begin{array}{r} 487 \\ \times 36 \\ \hline \end{array}$ (02 marks)	16	How many quarter litres are in two litres? (02 marks)

17	Put $>$ or $<$ to complete the statement: $^{-}20$ _____ $^{-}3$ . (02 marks)		
18	Draw an angle of $90^{\circ}$ . (02 marks)		
19	<p>What morning time is shown on the clock face? (02 marks)</p> 	20	<p>A rectangle measures <b>10m</b> by <b>8m</b>. Calculate its perimeter. (02 marks)</p>

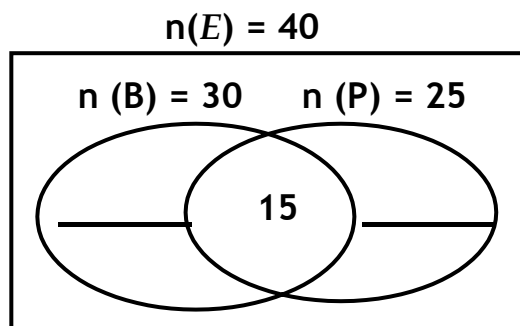
**SECTION B. (60 MARKS)**

- |           |  |
|-----------|--|
| <b>21</b> | <p>(a) Write <b>7908 413</b> in expanded form using values. <span style="float: right;"><b>(02 marks)</b></span></p><br><br><br><br><br><br><br><br><br><br><p>(b) What is the place value of <b>5</b> in the number <b>185792</b>? <span style="float: right;"><b>(01 mark)</b></span></p><br><br><br><br><br><br><br><br><br><br><p>(c) Round off <b>4863</b> to the nearest hundreds. <span style="float: right;"><b>(02 marks)</b></span></p>  |
| <b>22</b> | <p>Annet had sh 80,000. She gave sh <b>6500</b> to Aisha and she shared the remainder equally among her three sons.</p> <p>(a) How much did Annet remain with after giving some money to Aisha? <span style="float: right;"><b>(02 marks)</b></span></p><br><br><br><br><br><br><br><br><br><br><p>(b) How much did each son get? <span style="float: right;"><b>(02 marks)</b></span></p><br><br><br><br><br><br><br><br><br><br><p>(c) If one son's share is added to what Aisha got what does it become? <span style="float: right;"><b>(02 marks)</b></span></p> |

23 The Venn diagram shows farmers who grow Bananas (**B**) and farmers who grow Potatoes (**P**) in a certain village.

(a) Complete the Venn diagram correctly.

(02 marks)



(b) Find  $n(B - P)$

(01 mark)

(c) Find  $n(B \cap P)^I$

(02 marks)

24 (a) Find the sum of the first five consecutive square numbers.

(02 marks)

(b) The **LCM** and **GCF** of two numbers are **24** and **4** respectively. If one of the numbers is **12**, find the other number.

(02 marks)

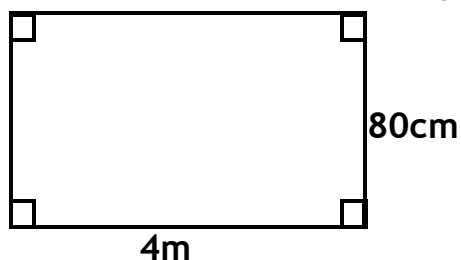
25 (a) A lorry covered **160km** in 2 hours. Calculate its speed in km/hr. **(02 marks)**

(b) How many minutes are in **2 hours 40minutes**? **(03 marks)**

26 (a) Add: **Litres** **ML** **(02 marks)**

5	968
+ 3	420

(b) Work out the area of the figure in square centimetres **(03 marks)**

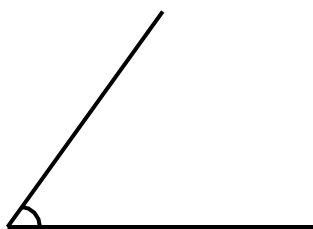


27 (a) Use a radius of **2.5cm** to construct a regular hexagon in the space below. **(03 marks)**

(b) Name the shape shown in the figure. **(01 mark)**



Measure the angle shown in the figure. **(01 mark)**



28 (a) Simplify:  **$4a - 2y + a + 3y$** . **(02 marks)**

(b) Solve for x: if  **$5x - 3 = x + 13$** . **(03 marks)**

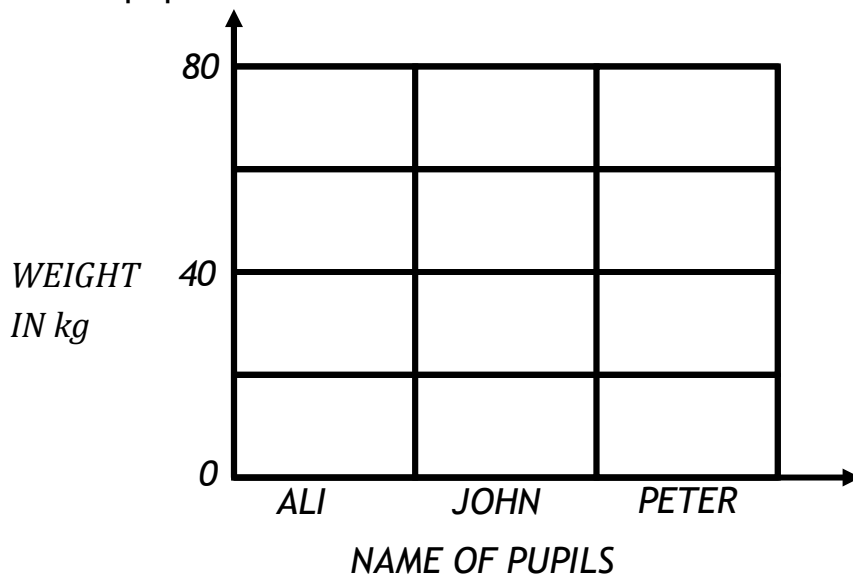


29

Three pupils had their weights recorded in the table below.

<b>PUPIL</b>	<b>WEIGHT IN KG</b>
ALI	40
JOHN	60
PETER	50

- (a) By shading show the information to form a graph showing the weights of the three pupils. (03 marks)



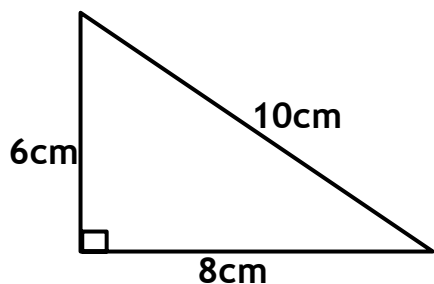
- (b) What is the average weight of the pupils? (02 marks)

30

- (a) Work out:  $\frac{5}{8} - \frac{1}{4} + \frac{1}{2}$  (03 marks)

- (b) Express  $\frac{25}{4}$  as a mixed number. (02 marks)

31 (a) Calculate the perimeter of the figure. (02 marks)



(b) Calculate the area of the figure. (02 marks)

32 (a) Find the next two terms of the sequence:  
1, 3, 6, 10, \_\_\_\_\_, \_\_\_\_\_. (02 marks)

(b) List the first four consecutive composite numbers. (02 marks)

(c) If a number ends with 0 or 5, it is exactly divisible by the number \_\_\_\_\_. (02 marks)