MeMo Educators

PRE-PRIMARY LEAVING EXAMINATION
2024
MATHEMATICS
Time Allowed: 2 Hours 30 Minutes

	EMIS No.					Personal No.		
Index No.								

Candidate's Name: ……………………………………………………………..

Candidate's Signature: ………………………………………………………

EMIS No. …………………………………………………………………………

Read the following instructions carefully:

1. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and Section **B** has **11** questions. The paper has **15 printed pages**.

2. Answer **all** questions. **All** the working for both sections **A** and **B** must be done in the spaces provided.

3. **All** working must be done using a **fountain pen**. Any work done in pencil other graphs and diagrams will **not** be marked.

4. **No calculators** are allowed in the examination room.

5. Unnecessary **changes** in your work and any handwriting that **cannot** easily be read may lead to **loss** of marks.

6. Do not fill anything in the table indicated: **"For Examiners' Use Only"** and boxes inside the question paper.
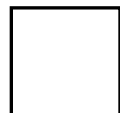
| FOR EXAMINERS' USE ONLY	
Qn. No.	**MARKS**
1 – 5	
6 – 10	
11 – 15	
16 – 20	
21 – 22	
23 – 24	
25 – 26	
27 – 28	
29 – 30	
31 – 32	
TOTAL	

SECTION A: 40 MARKS

*Answer **all** the questions in this section.*

*Questions **1** to **20** carry **two** marks each.*

1.   Work out: $12 \div 4$

2.   Write in figures: Six hundred two thousand, forty.

3.   Write 30% in decimal.

4.   Find the value of p: $3p = 5$(finite 7).

5.   Solve: $3^n \times 3^n = 3^2$

6.   Write 3,200 in scientific notation.

7.   With the help of a pair of compasses and a ruler, construct an angle of 105^0 in the space provided below.

8.   Round off 23.999 to two decimal places.

9.   Find the product of 4 and $2r - 3$.

10.   Okalu ate $\frac{3}{4}$ of his mangoes and 3 were left. How many mangoes did he have?

Turn Over
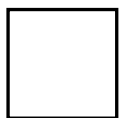
11. A wheel has a diameter of 70 cm. What distance does it cover in two revolutions?

12. Find the value of 3 in the numeral 320_{five}.

13. In a class, there are 15 boys and 25 girls. What is the ratio of girls to the whole class?

14. Arrange the given numbers in ascending order;   0.2,   0.02   and   0.4

15. Twenty jerrycans of 15.5 liters are used to fill a tank with water. Calculate the capacity of the tank in liters.
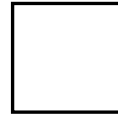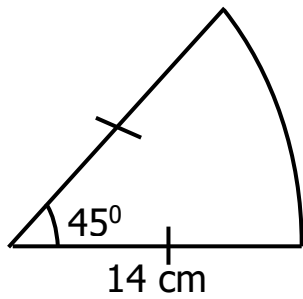
16. The bearing of town P from town Q is 225^0. What is the direction of town Q from town P?

17. Add:

h		min		sec
4	:	20	:	40
+ 2	:	40	:	30

18. Set Z has 5 elements. How many proper subsets can be formed from set Z?

19. Calculate the perimeter of the given sector. (Use $\pi = \frac{22}{7}$)

45⁰

14 cm

20. Two angles 2y and 4y and supplementary. Find the value of the first angle.

*Answer **all** the questions in this section.*

Marks for each question are indicated in brackets.

21. At a party attended by 40 guests, all were served with beans (B). 30 guests were served with both beans and chicken (C) and 10 guests were served with both beans and meat (M). 5 guests were served with all the three while 5 guests were served with beans only.

(a) Use the given information to complete the Venn diagram below.
(05 marks)

n(**B**) = 40

C = ...   **M** = ...

....

5
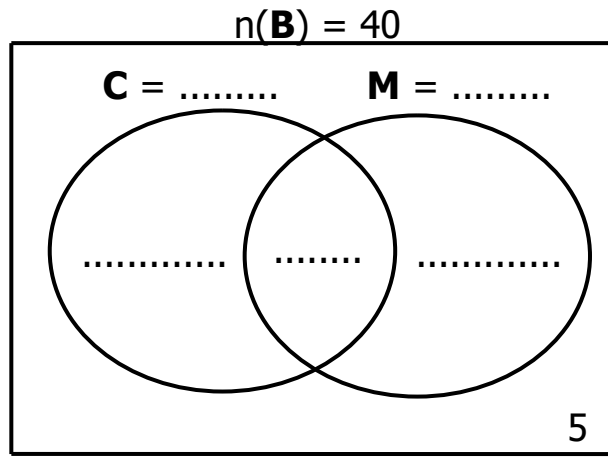
(b) How many guests were served with at most two types of soup?
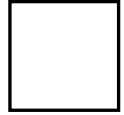*(01 mark)*

22. A regular polygon has 6 right angles.

(a) Name the polygon.   *(02 marks)*

Turn Over

(b)   Find the sum of all the interior angles of the polygon. *(02 marks)*

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23.   A motorist covered 170 km in $2\frac{1}{2}$ hours and another 130 km in $3\frac{1}{2}$ hours. He started the journey at 7:30 a.m.

(a)   At what time in 12-hour clock did he reach the destination?
(03 marks)

(b)   Calculate the average speed at which the motorist travelled for the whole journey. *(02 marks)*

24. A book costs (g + sh 300) and a pen costs a half of the cost of the book. If Deborah paid sh 4,800 for 3 books and 2 pens.

    (a)   Find the value of g.   *(04 marks)*

    (b)   How much did she pay for all the books?   *(02 marks)*
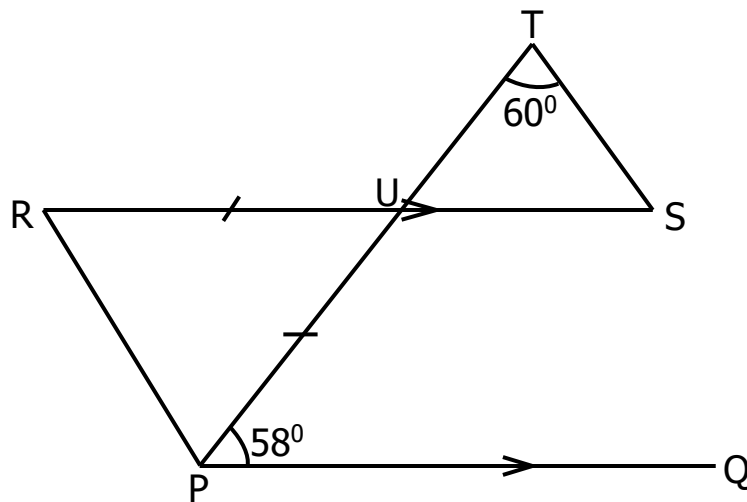
25.   (a)   Simplify: $4.8 \times 0.3 \div 0.12 + 0.4$ *(03 marks)*

(b)   Express 0.666... as a rational number in its lowest term.

(03 marks)

26.   In the figure below, line PQ is parallel to line RS and line RQ = PU. Angle QPU = 58⁰ and angle STU = 60⁰. Study the figure and use it to answer the questions that follow.

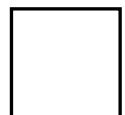Find the size of angle;

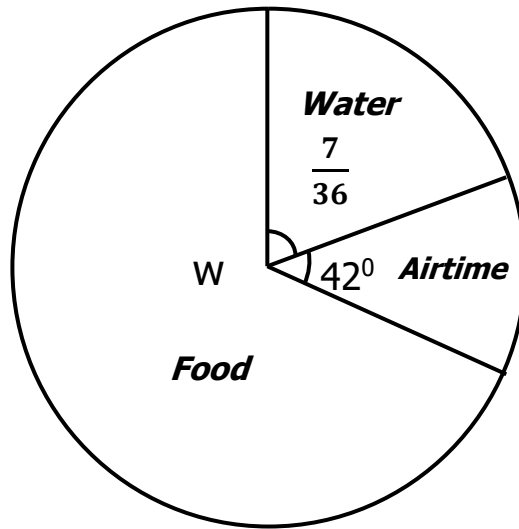(a)   PRU   (02 marks)

(b)   TSU   (02 marks)

27. The pie chart below shows how Ojok spent his salary of sh 480,000. Study the pie chart and use it to answer the questions that follow.

(a) Find the value of w in degrees. (03 marks)

(b) How much money does Ojok spend on airtime? (01 mark)

28. (a) Using a ruler and a pair of compasses only, construct a square ABCD such that diagonal AC = diagonal BD = 8 cm.   *(04 marks)*

(b) Measure side AB = ... cm   *(01 mark)*

29. The sum of three consecutive even numbers is 36. Find the range of the numbers.   *(05 marks)*

30. The figure below show a net of a cylinder with one of the ends open. Study it and use it to answer the questions that follow. (Use $\pi = \frac{22}{7}$)


28 cm

100 cm
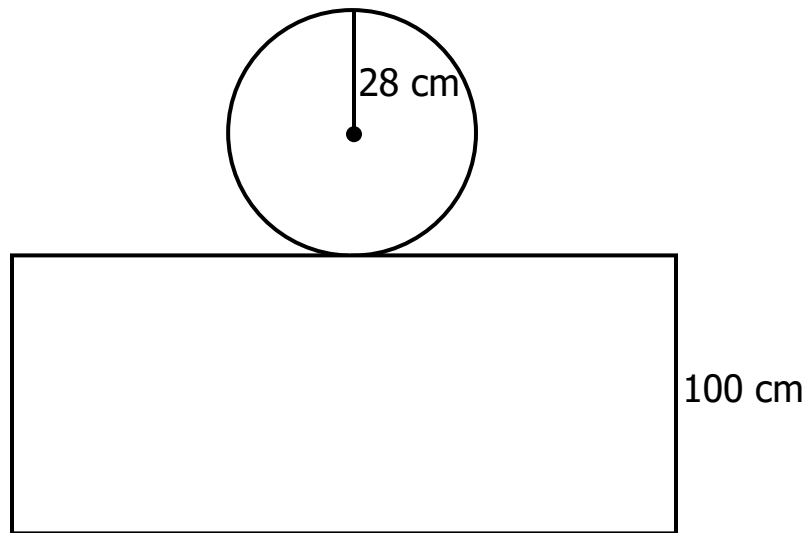
(a) Find the volume of the cylinder. *(02 marks)*

(b) Calculate the total surface area of the net. *(04 marks)*
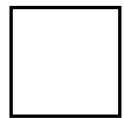
Turn Over

31. Wanyama borrowed sh 80,000 from a SACCO which charges an interest rate of 9% per week. He later returned a total amount of sh 108,800. Calculate the time in days he used the money. *(04 marks)*

32. The graph below shows the journey of the cyclist from town P to R via Q. Study the graph and use it to answer the questions that follow.
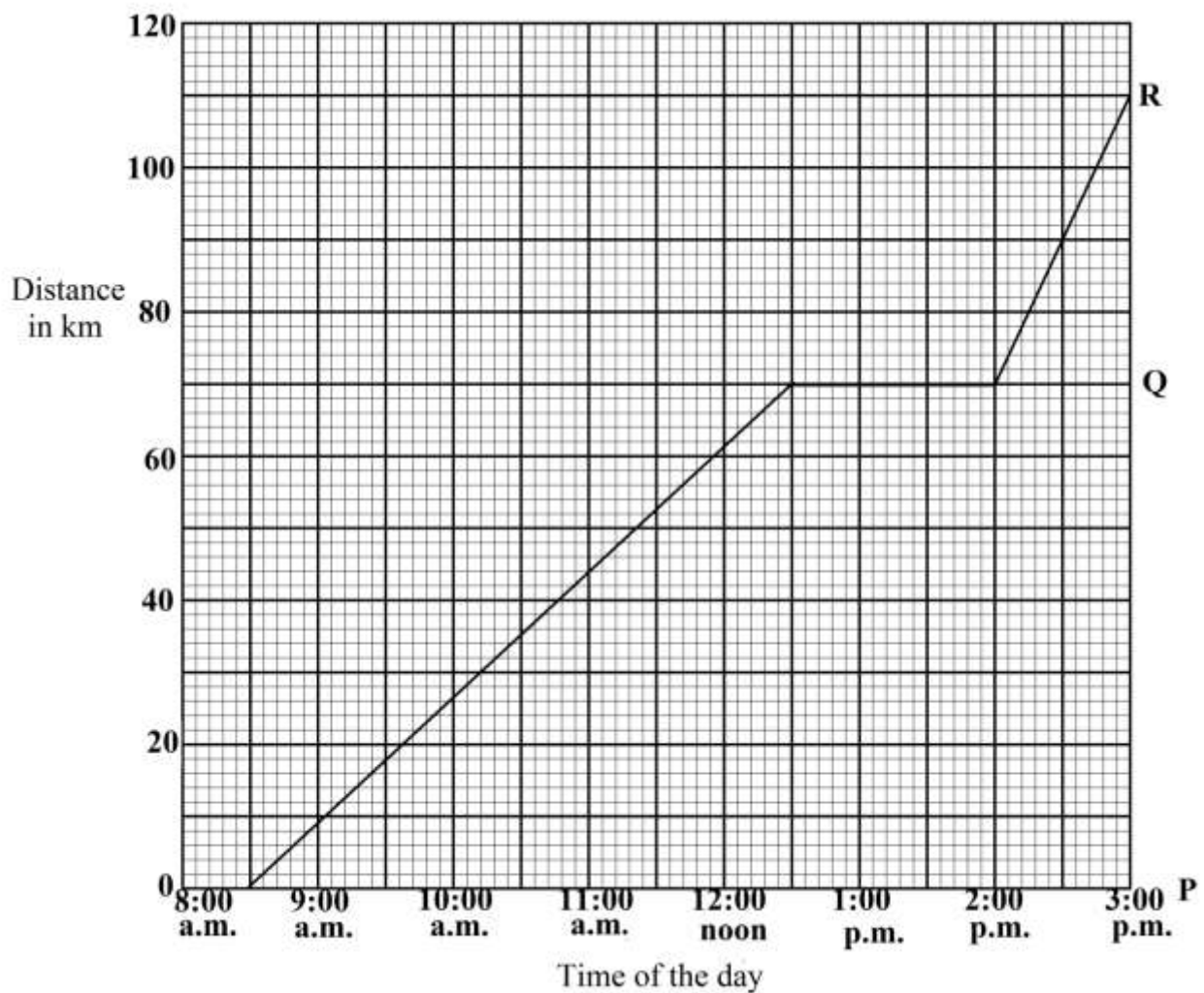
(a)   At what time did the cyclist start the journey?   *(01 mark)*

(b)   How far had the cyclist travelled by 12:30 p.m.?   *(01 mark)*

(c)   For how long did the cyclist rest?   *(01 mark)*

(d)   What distance did the cyclist cover in the second part of
         journey?   *(01 mark)*

END