THE REPUBLIC OF UGANDA

ADJUMANI PRIMARY SCHOOLS HEADTEACHERS' ASSOCIATION

PRIMARY LEAVING MOCK EXAMINATION, 2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random Number						Personal Number		

Candidate's Name: .....

Candidate's Signature: .....

School Emis No: .....

District: .....

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Read the following instructions carefully:

1. This paper is made up of **two** Sections: **A** and **B.**
2. Section **A**, has **20** short-answer questions **(40 marks)** and Section **B** has **12** questions **(60 marks)**
3. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working must be done using a blue or black ball - point pen or fountain pen. Only diagrams should be done in pencil.
5. No calculators are allowed in the examination room.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do not fill anything in the boxes indicated **"For examiners' use only"**

FOR EXAMINER'S USE ONLY		
Qn. No.	Marks	Exrs' No.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

Turn Over

SECTION A: (40 Marks)

Answer all questions in section A. Each question carries 2 marks.

1. Workout: 67 - 42.

2. Write 16.49 in words.

3. Given that Set R = {a, b, c}.
   List the proper subsets of Set R.

4. Workout: $\frac{3}{5} + \frac{1}{3}$.

5. Find the next number in the sequence.
   125, 64, 27, 8, ____.

6. Solve: $2x - 3 = 11$.

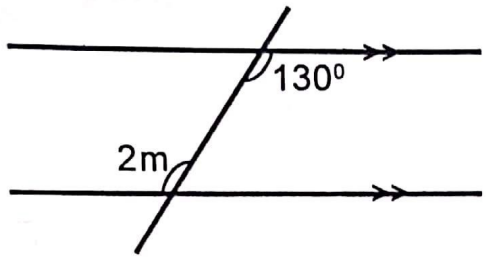
7. Maria went to the bank and withdrew five thousand shillings notes numbered from AP6342201 to AP6342300.
   How much money did she withdraw?

8. How many $\frac{1}{4}$ litres of milk can be got from a 20 litre jerrycan of milk?

9. Simplify: $^{-}4 + {}^{+}6$.

10. The average marks scored by three girls is 23. If the total marks scored by two girls is 51.
    Find the marks of the third girl.

11. Find the value of m in the diagram below.

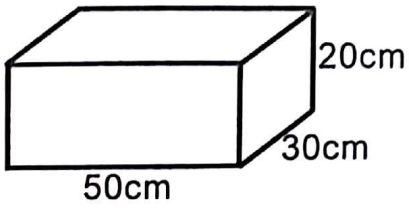


12. An examination that started at 9:15am lasted for $2\frac{1}{2}$ hours.
At what time did the examination end?

13. Workout the G.C.F of 24 and 18.

14. Express 0.2727 as a common fraction in its lowest term.

15. Workout the volume of the figure below.



16. Using a pencil, a ruler and a pair of compasses only, construct angle of 135^0.

17. Draw a venn diagram to show that all girls (G) are females (F).

18. Express 36km/hr as m/s.

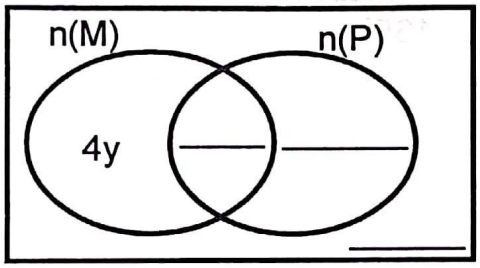
19. Workout: 2 + 6 = ...(mod 7).

20. Change 101_{two} to base ten.

SECTION B: (60 Marks)

21. At a birthday party, 4y guests took Mirinda (M) only, (2y + 12) guests took pepsi (P) only, y guests took both drinks while 5 guests did not take any of the drinks.

(a) Use the above information to complete the venn diagram below. *(3marks)*



(b) If 42 guests took pepsi, how many guests took both drinks. *(2marks)*

22. (a) Express 0.0064 in scientific notation. *(2marks)*

(b) Solve for x: $2^x \div 2^1 = 64$. *(3marks)*

23. Sarah went to the market and bought the following items.
4 bars of soap at sh.3500 per bar.
$2\frac{1}{2}$ kg of sugar at sh.2400 each kg.
18 oranges at sh.3000 for every 6 oranges.

(a) Workout Sarah's total expenditure. *(4marks)*

(b) If she was given a discount of 10%, how much money did she pay for the items. *(2marks)*

24. (a) Workout: $1001_{two} + 101_{two}$. *(2marks)*

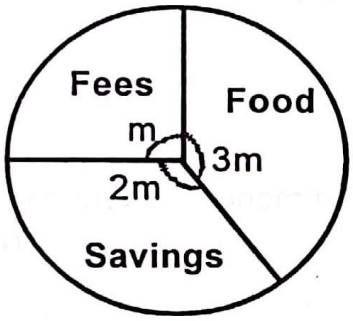
(b) Find the value of 6 in 463872. *(2marks)*

25. James uses $\frac{2}{5}$ of his land growing cassava, $\frac{1}{3}$ of the remainder for growing beans and the rest for growing simsim.

(a) Find the fraction of the land he uses for growing simsim. *(3marks)*

(b) If his total land size is 15 hectares, how many hectares does he use for growing beans? *(2marks)*

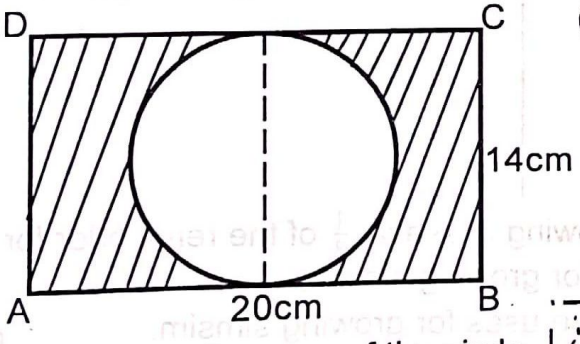
26. The pie-chart below shows how Jonathan spends his monthly income. Use it to answer the questions that follow.



(a) Find the value of m in degrees. *(2marks)*

(b) If he saves Sh.120,000, workout his monthly income. *(3marks)*

27. **Study the figure below and use it to answer questions that follow.**



(a) Find the area of the rectangle ABCD. *(2marks)*

(b) Calculate the area of the circle. *(2marks)*

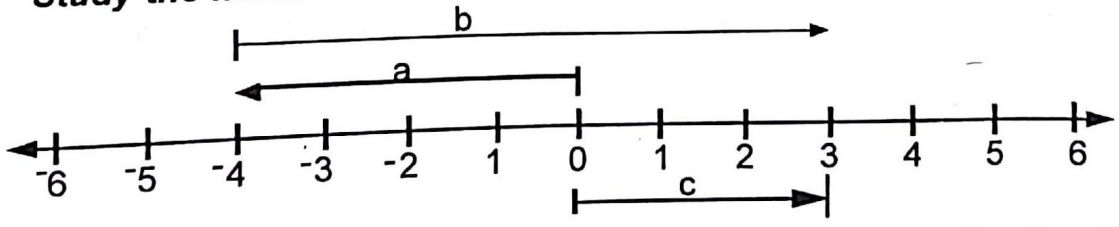
(c) Workout the area of the shaded part. *(2marks)*

28. The sum of 3 consecutive numbers is 93. If the first number is less than the second number n by 2, find the value of n. *(4marks)*

29. (a) Using a ruler and a pair of compasses only, construct a parallelogram PQRS where $\overline{PQ}$ = 6cm, QR = 4cm and angle P = 60^0. *(4marks)*

(b) Measure the diagonal QS in cm. *(1mark)*

30. ***Study the numberline below to answer the questions about it.***



(1mark each)

(a) State the integers represented by;

(i) a = _____

(ii) b = _____

(iii) c = _____

(b) Write the mathematical statement represented by the numberline. *(2marks)*

31. (a) Solve the inequality: $\frac{3x}{4} - 8 > 1$. *(3marks)*

(b) Simplify: $6k - p + k + 8p$. *(2marks)*

32. A car took 2 hours to cover a certain journey at 160km/hr. It then returned through the same route in 3 hours.

(a) What distance did it cover during the first journey? *(2marks)*

(b) Workout the average speed of the car for the whole journey. *(3marks)*

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