SUCCESS ACADEMIC FOUNDATION OF UGANDA (SAFU)
PRE - PRIMARY LEAVING EXAMINATION SET VI, 2024

MATHEMATICS
Time Allowed: 2 Hours 30 Minutes

EMIS NO						PERSONAL NO		

Candidate's Name: _____

Candidate's Signature: _____

School Name: _____

District Name: _____

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

Read the instructions carefully:

1. This paper is made up of Sections A and B.

2. Section A has 20 short-answer questions. (40 marks)

3. Section B has 12 questions. (60 marks)

4. Answer All questions. All answers to both Sections A and B must be written in the spaces provided.

5. All answers must be written using blue or black ball point pen or ink. Diagrams should be drawn in pencil

6. Unnecessary alteration of work may lead to loss of marks.

7. Any handwriting that cannot be read may lead to loss of marks.

8. Do not fill anything in the box indicated For Examiners' Use Only.

Turn Over

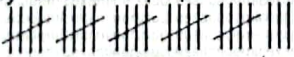## SECTION A: (40 MARKS)
Questions 1 to 20 carry two marks each.
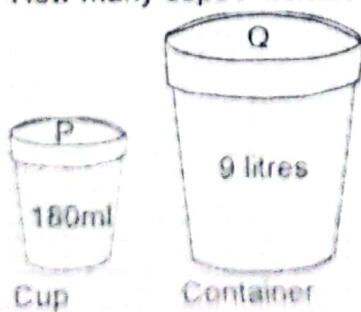
1. Work out : $413 + 1$.

2. Simplify: $^+10 - (^-2)$

3. Write 362578 in words.
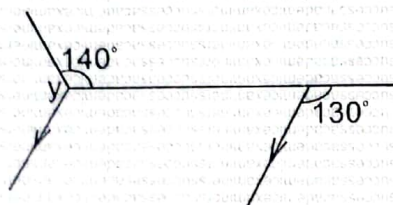
4. Share 8.25 litres of milk equally among 3 girls.

5. A teacher on duty counted pupils without sports wear in the school and tallied them as follows $\text{IIII} \ \text{IIII} \ \text{IIII} \ \text{IIII} \ \text{IIII} \ \text{III}$
How many pupils were without sports wear?

6. How many cups P can be filled from container Q?

Q

P

9 litres

180ml

Cup   Container

7. The area of a circle is 38½cm². Find its radius.

8. Find the value of y in the figure.

9. The product of two numbers is 5½ and one of them is $2\frac{2}{5}$. Find the other number.

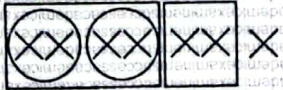10. Find the difference of the first and median number in the sequence.

    12,   13,   15,   18,   _____

11. The bearing of P from Q is 048°. Find the bearing of Q from P.

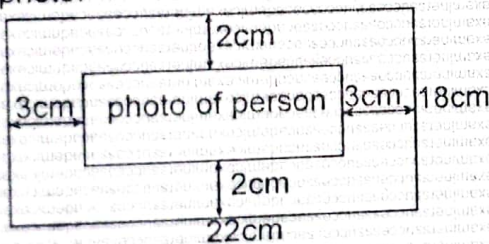12. Given that a = 0, b = ⁻4 and c = ⁻2. Find the value of $3c^a - 3b$

13. Study the grouping in base two below.

Write this grouping in base two numeral.

14. The examination that started at 10:45a.m lasted for 2¼ hours. Express the ending time in 24 hour clock.

15. The figure below shows a photo in a frame. Find the length and width of the photo.

16. Solve for p: 3p + 4 = 2 (mod 5)

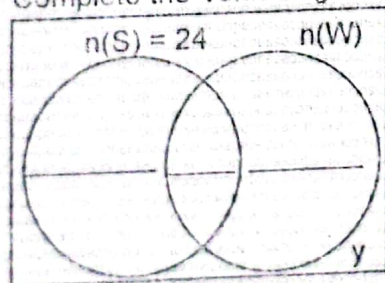17. A tank measuring 40cm by 30cm by 60cm is 75% full of water. How many litres are in the tank?

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18. Arrange $\frac{1}{2}$, $\frac{3}{5}$, $\frac{1}{4}$, $\frac{3}{10}$ in descending order using percentages only.

19. 125 gm of millet flour costs shs. 1200. How much will a breast feeding mother pay for the packet of 1½ kg?

20. Write down a pair of skew lines shown by the edges of the box below.

SECTION B

21. At a party, 24 guests took soda, $(y + 9)$ took water (W) only, $(y + 5)$ took both drinks, while y took neither of the two drinks and 11 took soda only.

    a) Complete the Venn diagram. (3 marks)
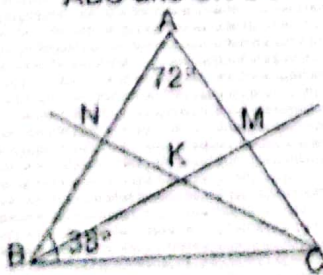

    b) Find the value of y . (2 marks)

22. A motorist drove at a steady speed of 120km/hr for 1 hour 30 minutes from C to town D. He returned at an average speed of 45 km/hr.

   a) How far is town D from C? (2 marks)

   b) Work out his average speed for the whole journey. (3 marks)

23. $\frac{3}{5}$ of the fruits are pineapples, $\frac{1}{8}$ of the remainder are mangoes and the rest of the fruits are oranges. If there are 35 oranges in the container, using a radius of 4cm construct an accurate pie chart. (5 marks)

24. a) The figure ABC is a triangle, angle BAC = 72°, given that BM bisects angle ABC and CN bisects angle ACB. Calculate the size of angle BKC. (4 marks)

6

25. a) Express 4.25×10^{-2} as an ordinary numeral. (2 marks)

   b) Solve $2^p \div 32 = 1$. (2 marks)

26. Gama's salary of sh. 750,000 was increased by 25%.
   a) What is her new salary? (2 marks)

   b) A trader bought a bicycle at a cost of sh. 960,000 and sold it at sh. 800,000. Calculate his percentage loss. (2 marks)
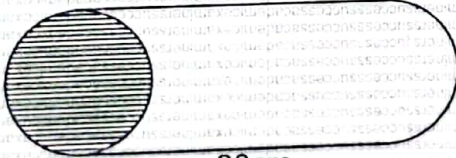
   c) Express 12¼% as a ratio. (1 mark)

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27. In an interview of new entrants in a P.4 class, 25 questions were asked. Panelists awarded 4 marks for every correct response and deducted 2 marks for every wrong response.

a) If an interviewee gave 15 correct responses, how many marks did the she/he get? (2 marks)

b) Find the number of correct responses given by an interviewee who got 88 marks. (3 marks)

28. The figure below is a cylinder. If the circumference of the shaded part is 880cm,

a) Calculate the radius of the cylinder. (3 marks)

20cm

b) What is the area of the curved surface of a cylinder? (2 marks)

29. The total area of two faces of a square prism is 882cm².
a) Find the volume of the prism. (3 marks)

b) Prime factorize 108 and express the prime factors using subscripts.
(2 marks)

30. At Kakawa P/S, the tailoring room is 60 metres from the dining hall on a bearing of 120° and the main hall is 40 metres south of the tailoring room.
   a) Draw a sketch diagram to show the three places. (1 mark)

   b) Using a scale of 1cm to represent 10 metres, draw an accurate diagram to show the three places. (3 marks)
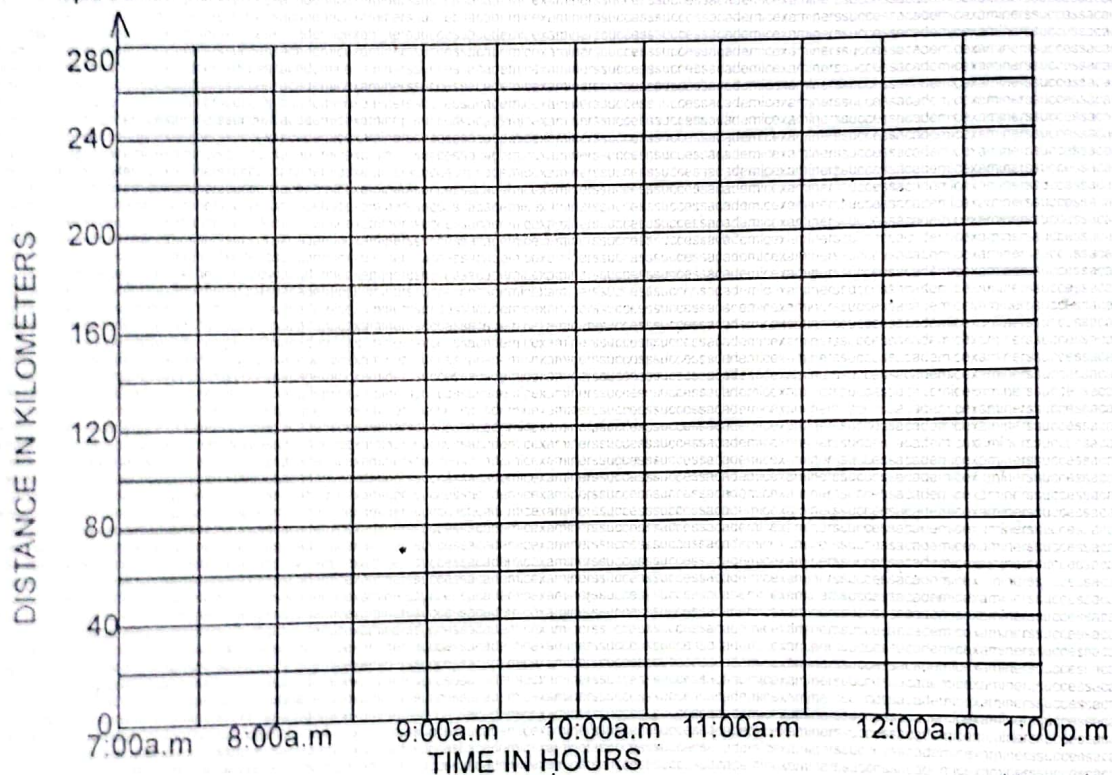
   c) Find the shortest distance between the dining room and the main hall. (1 mark)

31. Rashida went to the super market and bought the following items shown on the table. Study it carefully and complete it. (5 marks)

Item	Quantity	Unit cost	Total amount
Sugar	1¼ kg	sh. 4000	sh. _____
Soap	_____	sh. 5500	sh. 16500
Bread	5 loaves	sh. _____	sh. 15000
Blue band	_____ tins	sh. 9000	sh._____
		Total	sh. 63500

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32. Lule left town R at 7:00 a.m and drove at 80 km/hr for 2 hours to town S. He rested for a half an hour at S. He left town S and drove for 2 hours to town T at a speed of 40 km/hr.

a) Draw Lule's journey on the graph. (4 marks)

b) At what time did Lule arrive at town T? (1 mark)