

# SUCCESS ACADEMIC FOUNDATION OF UGANDA (SAFU)

## PRIMARY LEAVING MOCK SET I EXAMINATION, 2023



### 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:**

**FOR EXAMINERS' USE  
ONLY**

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.**

Qn. No.	MARKS	Final Mark
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
<b>TOTAL</b>		

**Turn Over**

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

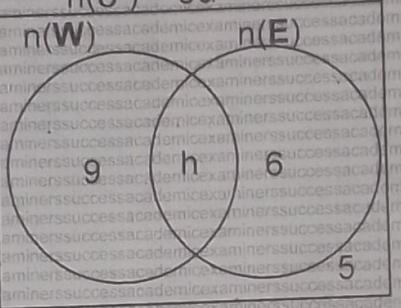
**Questions 1 to 20 carry two marks each.**

**1. Work out:**  $53 - 35$

**2. Write in figures. "Twenty three thousand four".**

**3. Study the Venn diagram below and find the value of h.**

$$n(E) = 30$$

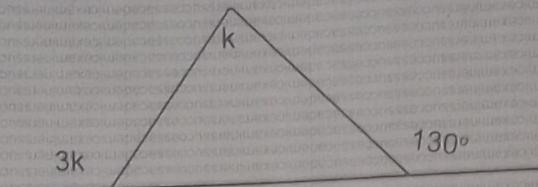


**4. Express  $\frac{5}{8}$  as a decimal fraction.**

**5. Round off 48.678 to the nearest whole number.**

**6. Find the range of -2, 0, -5 and 5**

7. What is the value of  $k$  in the figure below?



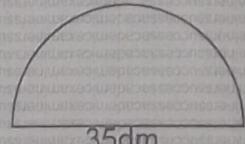
8. Kabumu's poultry farm produces 3,000 eggs in a day. If the eggs are packed in trays of 30 eggs, how many trays does the farm produce in a week?

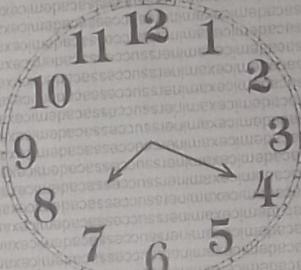
9. Using a ruler, a pencil, and a pair of compasses only, construct an angle of  $150^\circ$ .

10. Solve for  $m$ :  $\frac{1}{3} + m = 3$

11. The cost of 3 books is sh. 42,000, what is the cost of 7 similar books?

12. Work out the perimeter of the figure below.



13. The lowest common multiple of two numbers 16 and M is 48 and their Greatest Common Factor is 4. Find the value of m.
14. Change 0.2 litres to millilitres.
15. A 30 minute lesson ended at the time shown on a clock face below. At what time did the lesson begin?
- 
16. Subtract  $5 - y$  from  $2y - 3$
17. Find the sum of the 3<sup>rd</sup> and 9<sup>th</sup> triangular numbers.

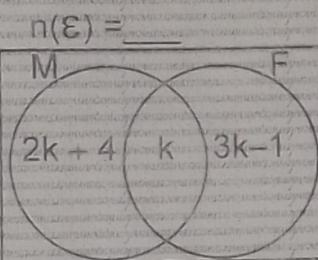
18. Increase sh. 60,000 by 20%

19. There are 16 subsets in set P. How many elements are in set p?

20. What number has been written in standard notation form to give  $(2.3 \times 10^{-3})$

### SECTION B

21. In a class, the number of pupils who eat meat (M) only is equal to the number of pupils who eat fish (F) only. Study the Venn diagram representing this information below



a) Find the value of k

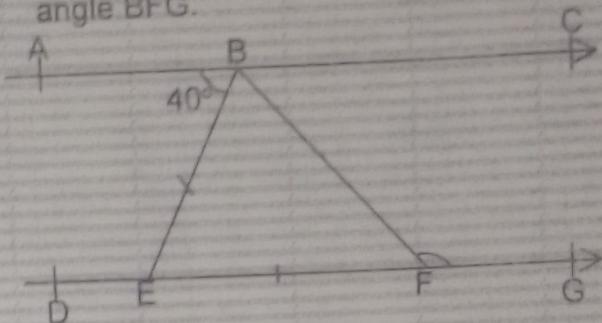
(3 marks)

b) Calculate the total number of pupils in the class?

(2 marks)

22. a) The interior angle sum of a regular polygon is  $1080^\circ$ . Name the polygon. (3 marks)

- b) In the figure below, AC is parallel to DG, angle ABE =  $40^\circ$ . Find the size of angle BFG. (2 marks)



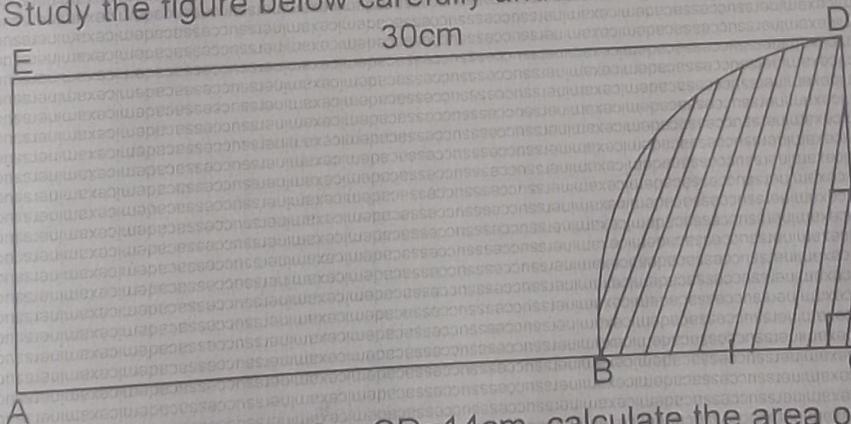
23. In a club, the weight of members is as follows: 62kg, (2p - 6)kg, 76kg and 2p kg  
a) If the average weight is 63kg, find the value of p. (3 marks)

- b) Find their median weight. (2 marks)

24. a) Kawuki was given cards with the following numbers. Help him to write a single number out of the cards. (2 mark)

$$[9000] + [40000] + [3] + [60]$$

- b) Find the sum of the place value of 9 and 6 from the number formed in (a) above. (2 marks)
25. Mutwe spent  $\frac{1}{3}$  of his salary on buying drinks and  $\frac{1}{2}$  of it on buying clothes. If he spent 25% of the remainder on rent and was left with sh.60,000, (3 marks)
- a) What fraction was left?
- b) How much more did he spend on clothes than rent? (2 marks)
- 26 Study the figure below carefully and use it to answer the questions that follow.



- a) Given that  $BC = CD = 14\text{cm}$ , calculate the area of the shaded region. (2 marks)

(3 marks)

b) Work out the distance of the unshaded region.

27.

Okello went for shopping and bought the following items.

3kg of posho at sh. 4,000 per kg

1½ kg of meat at sh. 14,000 per kg

250gm of sugar a sh. 5,000 per kg

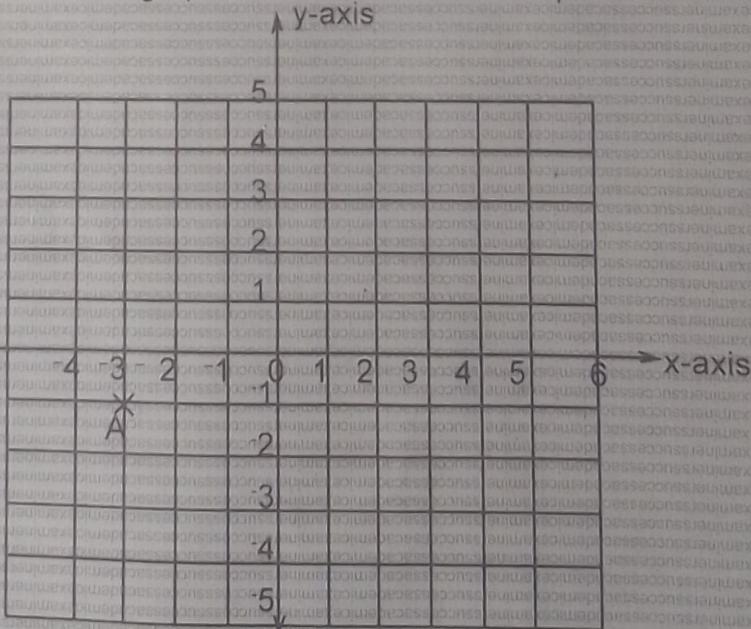
2 bars of soap at sh. 12,000

What was his total expenditure if he was given a discount of sh. 3,000 after buying all the items.

(5 marks)

28.

Use the co-ordinator graph below and answer the questions that follow:



a) Write the co-ordinates of point A.

(1 mark)

- b) Plot points B(-1, 2) and C(5, -1) on the graph. (2 marks)
- c) Join the points A to B and B to C. (1 mark)
- d) Locate point D on the graph and join it to point A and C such that ABCD is a kite. (1 mark)

29. a) Using a pair of compasses, a ruler, and a well sharpened pencil, construct a

Rhombus KLMN where  $KL = 8\text{cm}$ ,  $LM = 6\text{cm}$  and angle  $KLM = 120^\circ$ .

(4 marks)

- b) Measure diagonal KM. (1 mark)
30. a) Simplify:  $3(y-1) - 2(y+2)$  (2 marks)

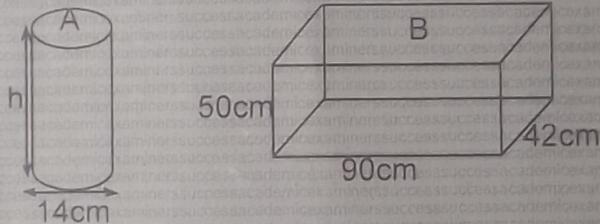
- b) Munte is 35 years and his son is 10 years. In how many years time will the son be a half his age? (2 marks)

31. Mary, Martha and Mercy shared books in the ratio of 2:3:5 respectively. If Mercy recorded 24 books more than Mary.

a) How many books were shared altogether? (3 marks)

b) Express Martha's number of books as a percentage of the total number of books. (2 marks)

32. The figure below shows a cylindrical tin A to be packed in a big box B



a) If 5 layers were formed after tin (A) had been packed in box (B). Find the value of  $h$ . (2 marks)

b) Calculate the volume of the space left empty after packing tins (A) in box (B) (3 marks)