

# SHEEMA DISTRICT EXAMINATIONS BOARD

PRIMARY LEAVING MOCK EXAMINATIONS 2023

MATHEMATICS

TIME ALLOWED 2 HOURS 30 MINUTES

INDEX NO.

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CANDIDATE'S NAME.....

CANDIDATE'S SIGNATURE.....

SCHOOL NAME.....

**Read the following instructions carefully**

1. This paper is made up of two sections A & B
2. Sections A has 20 questions (40 marks)
3. Section B has 12 questions (60 marks)
4. Attempt all questions. All working and answers for both sections A and B must be shown in the space provided. No pieces of paper must be provided for rough work.
5. All answers must be written using a blue or black ball point pen or ink and **Not** pencil. Only diagrams should be drawn in pencil.
6. Unnecessary alteration of work will 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 box indicated "for examiner's use only" and those inside the question paper.

FOR EXAMINER'S USE ONLY		
QN NO.	MARKS	EXR'S NO.
1 - 5		
5 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
29-30		
31-32		
TOTAL		
Turn over		

## SECTION A

1. Fill in the missing numbers

$$\begin{array}{r} 5 \quad 4 \\ + \quad \square \quad 3 \\ \hline 7 \quad \square \end{array}$$

2. Write in figures fifty nine thousand, forty.

3. Write CXCIX in Hindu Arabic numerals.

4. If  $a = -2$ ,  $b = 3$ , Evaluate  $b^2 - 4a$

5. If set  $K = 4$  elements, How many subsets are in set  $K$ ?

6. The Clock face below shows time in the afternoon

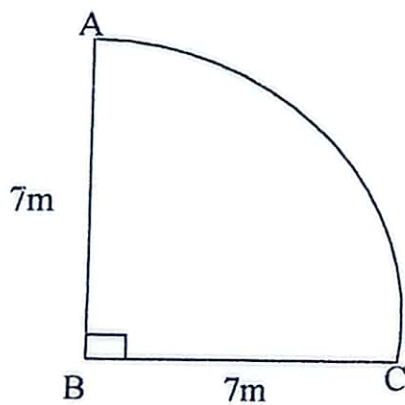


Write the time shown in 24hr clock.

7. Write the place value of 3 in  $235_{\text{six}}$

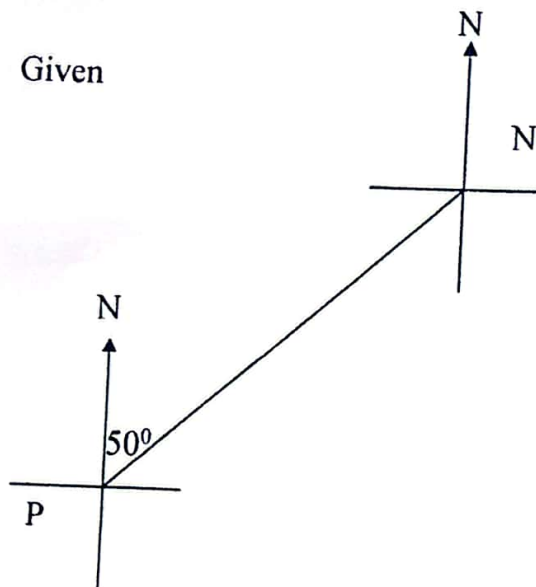
8. A car uses 7 litres of petrol to cover a distance of 28km. How many litres of petrol can it use to cover 64km.

9. Find the perimeter of the figure below



10. Using a pair of compasses and a ruler only, construct an angle of  $75^\circ$

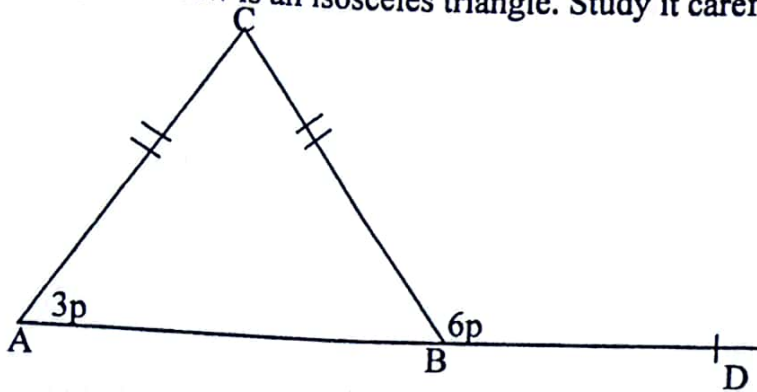
11. Given



What is the bearing of P from N?

12. Find the next number in the sequence.  
1, 2, 10, 37, \_\_\_\_\_

13. The figure below is an isosceles triangle. Study it carefully and answer questions.

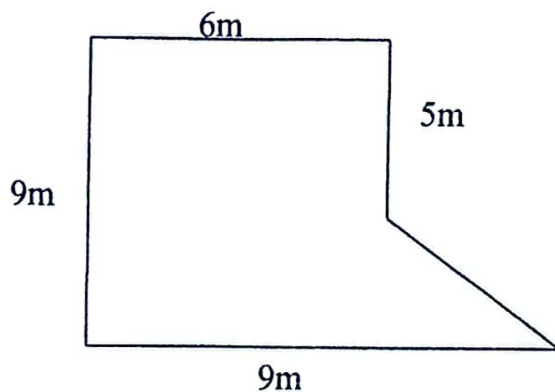


Find the value of P

14. Solve the inequality  
 $9 \leq -3(K-1)$
15. Express 0.7272.....as common fraction in its simplest form.
16. A farmer deposited shs. 90,000 in a bank that offers an interest rate of  $2\frac{1}{2}\%$  per year for 8 months. Find the simple interest a farmer got in 8 months.
17. Find the median of 2,4,6,8,7,3

18. John is the fifth person on either of the two sides of the line. How many pupils are in the line?

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



Calculate its perimeter

20. What number has been expanded to give  $(6 \times 10^3) + (4 \times 10^1) + (6 \times 10^{-2})$

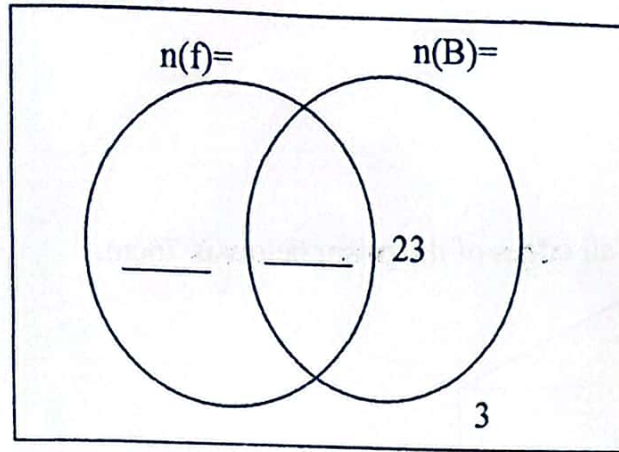


### SECTION B

21. In a group of 49, 34 eat beef (B) 3d eat fish (F) only; some people eat both dishes while 3 people eat other dishes.

(a) Represent the above information on the venn diagram. (2mks)

$$N(\mathcal{E}) = 49$$



(b) Find the value of d (2mks)

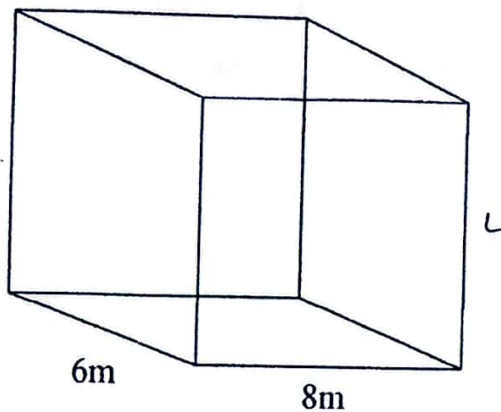
(c) Find the probability of picking at random a person who eats one dish.

22. The mean of  $2p+5$ ,  $p+4$ ,  $3p+1$  and 12 is 19.

(a) Fine the value of P (3mks)

(b) Work out their median (2mks)

23. The sum of the lengths of all edges of the prism below is 76cm.



(a) Find the length of edge  $L$  (2mks)

(b) Calculate its volume (2mks)

24. Study and complete the table below (6mks)

Item	Quantity	Unity cost	Amount
Beans	3kg	sh _____ per kg	sh. 14400
Rice	_____ kg	sh 5000 per kg	sh 2500
Milk	250ml	sh 3000 per litre	sh _____
Biscuits	2pkts	sh _____ per packets	sh _____
	<b>Total exp</b>		<b>sh 29650</b>



25. Using a ruler, a pencil and a pair of compasses only, construct a triangle TVS where angle TVS =  $45^\circ$ , VS = 6cm and angle VST =  $60^\circ$ .  
(a) Drop a perpendicular from point T to meet VS at K (4mks)

(b) Measure length TK (1mk)

26. At Nyakanyinya P/S, two bells are used one bell rings every after 40 minutes and another bell rings every after 30 minutes for upper and lower classes respectively.  
(a) After how long will the two bells ring together? (2mks)

(b) If they are first rung at 11:00am, at what time will the two bells ring together again? (2mks)

27. (a) Simplify:  $\frac{0.12 \times 5.4}{0.03 \times 0.6}$  (3mks)

(b) Work out:  $\frac{2}{3}$  of  $\frac{3}{4} - \frac{1}{3}$  (2mks)

28. The tax driver left Kabwohe to Mbarara at 10:30am driving at a speed of 80km/hr. The driver reached Mbarara at 2:00pm.

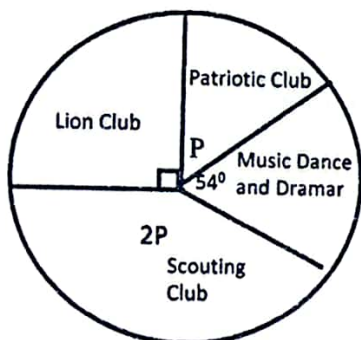
(a) Calculate the time taken by the driver to reach Mbarara. (2mks)

(b) Find the distance between Kabwohe and Mbarara (2mks)

29. Teacher Alson is thrice as old as her daughter. In 5 years, the ratio of Alson's age to his daughter will be 7:3 respectively.  
(a) How Old is her daughter now? (3mks)

(b) How old will the teacher be then? (2mks)

30. The pie-chart below shows how pupils at Mbarara Junior school are distributed in various clubs in the school.



- (a) There are 216 pupils in patriotic club. Find the total number of pupils in the school. (4mks)

(b) Express the number of pupils in the patriotic club as a percentage of the whole school. (1mk)

31. Jumbo, Tendo and Mambo contributed sh 24000, sh. 36,000 and sh. 60,000 respectively for a joint business which made a profit of shs 51,000 by the end of the business, they then agreed to separate and each of them starts his own and they each shared the total money according to their initial contributions. How much did each person get?

32. The sum of 4 consecutive odd numbers is 56. If the first number is  $(y+2)$   
(a) Find the value of  $y$  (2mks)

(b) List the numbers. (4mks)