

# MAKINDYE SSABAGABO MUNICIPALITY EXAMINATION BOARD

## PRIMARY LEAVING MOCK - 2024

### MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

INDEX NO:

Random No.						Personal No.		

Candidate's Name : \_\_\_\_\_

Candidate's Signature : \_\_\_\_\_

School : \_\_\_\_\_

Division : \_\_\_\_\_

#### Read The Following Instructions Carefully:

1. Do not write your school or district name anywhere on this paper.
2. This paper has two sections: A and B.  
Section A has 20 questions and section B has 12 questions.
3. Answer all questions. 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 ink. Any work done in pencil other than graphs and diagrams will not be marked.
5. No calculators are allowed in the examination room.
6. Unnecessary changes in your work and handwriting that cannot easily be read may lead to loss of marks.
7. 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	EXR'S 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 this section.**

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

1. Workout:  $95 - 62$ .

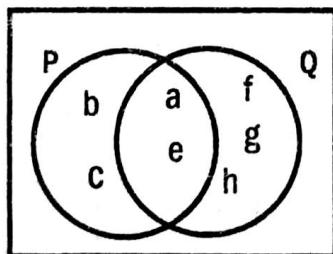
2. Write in figures: Eighty-eight thousand eighteen.

3. Simplify:  $\frac{2}{3}(6m - 9)$ .

4. What is the next number in the sequence below?

1, 8, 27, 64, \_\_\_\_\_

5. The Venn diagram below shows sets P and Q. Use it to answer questions that follow.

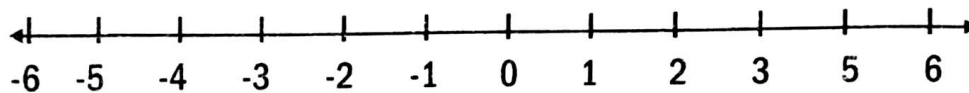


Find  $n(P \cap Q)$

6. Express 15mls in km/h.

7. A lady withdrew ten thousand shilling notes numbered consecutively from BX2459915 to BX2459964. How much did she withdraw?

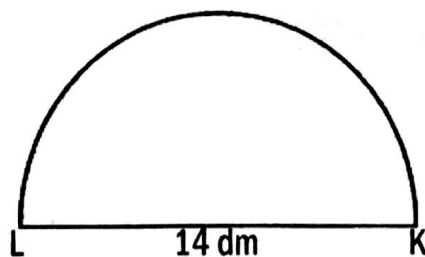
8. Workout:  $3 \times -2$  using the number line below.



9. The temperature of ice taken at intervals of one hour were:  $-10^{\circ}\text{C}$ ,  $7^{\circ}\text{C}$ ,  $-15^{\circ}\text{C}$  and  $-5^{\circ}\text{C}$  respectively. What was the range of the temperatures?

10. Workout:  $1\frac{7}{12} - \frac{5}{6}$

11. The figure below is a semi-circle with diameter  $\overline{LK} = 14\text{dm}$  as shown.



Calculate the perimeter of the whole figure (Take  $\pi = 3\frac{1}{7}$ )

12. Solve:  $10 - 2n = 4$

13. A motorist travelling from Entebbe to Nakasongola a distance of 360km left at 7:30 a.m. At what speed must he ride in order to reach Nakasongola at exactly 12:00noon?

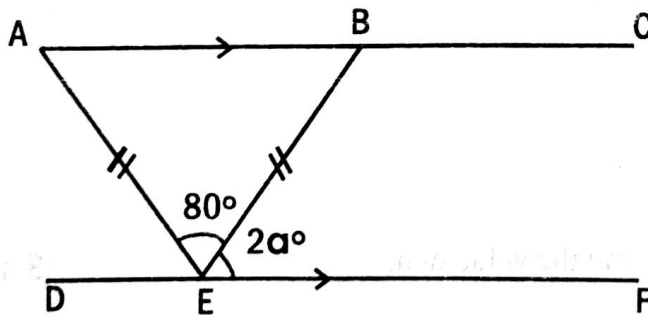
14. What number has been expanded to get:  
 $(7 \times 10^3) + (3 \times 10^1) + (9 \times 10^{-2})$ ?

15. A cylindrical container has a capacity of 15.4 litres. Given that the container has a radius of 7cm, find its height (Take  $\pi = \frac{22}{7}$ ).

16. Workout:  $2 - 5 = \underline{\hspace{1cm}}$  (finite 7)

17. In a school,  $\frac{1}{5}$  of the candidates passed in division one and the rest in division two and three. Given that the percentage of those who passed in division two was 10% more than those in division three. What percentage of the whole class passed in division three?

18. In the figure below, line  $\overline{AC}$  is parallel to  $\overline{DF}$  and angle  $AEB = 80^\circ$  as shown.



Find the value of  $\alpha$ .

19. Using distributive property, workout  
 $50 \div 3 - 29 \div 3$

20. With the help of a ruler, pencil and pair of compasses only, construct an angle of  $135^\circ$  in the space below.

**SECTION B (60 MARKS)**

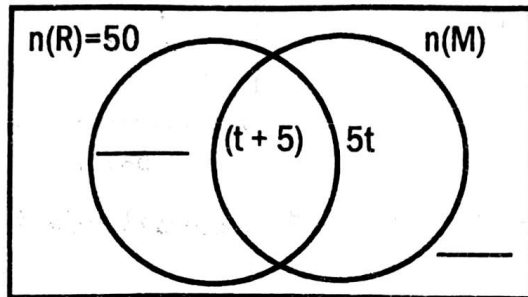
- 21.a) Write 0.00205 in standard form. (2 marks)

- (b) Given that  $37_n = 42_{\text{eight}}$ . Find the value of n. (3 marks)

22. In a certain village, 50 farmers grow Rice (R), 5t farmers grow maize (M) only, (t + 5) farmers grow both Rice and Maize while 10 farmers grow neither of the two crops.

(a) Complete the Venn diagram below.

(2 marks)



- (b) Given that 40 farmers do not grow Rice, how many farmers grow Rice only?

(3 marks)

- 23.a) Express 0.1818..... as a common fraction in its lowest terms. (2 marks)

b) Simplify:  $5\frac{1}{4} \div 1\frac{1}{8} \times \frac{3}{7}$

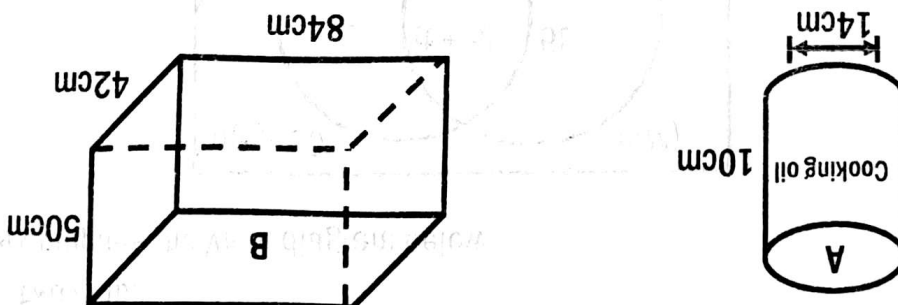
(3 marks)

Item	Quantity	Unit cost	Amount
Milk	4 ½ litres	sh. 1,200	sh. _____
Soap	_____ bars	sh. 4,600	sh. 9,200
Salt	500gm	sh. _____	sh. 1,000
Meat	_____ kg	sh. 12,000	sh. _____
Total Expenditure			sh. 57,600

25. A cook went to a super market and bought the following items shown in the table below.

b) Calculate the amount of space that will be left in the box when only three layers are packed in box B. (4 marks)

a) How many tins of size A can be packed in box B to make it full? (2 marks)



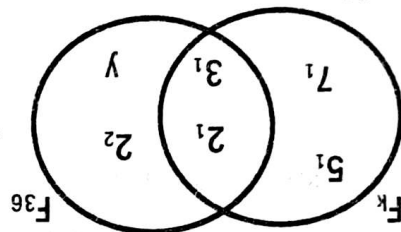
24. In a factory, cooking oil in cylindrical tins of size A are packed in boxes of size B.



a) Complete the table. (5 marks)

b) How much would he pay if he is given a discount of 15%? (1 mark)

26. The Venn diagram below shows the prime factors of  $y$  and 36. Use it to answer the questions that follow.



a) Find the value of  $k$ . (2 marks)

b) What is the value of  $y$ ? (2 marks)

c) Calculate the LCM of  $k$  and 36. (2 marks)

27. a) Using a ruler, pencil and pair of compasses only, construct triangle STU in which  $ST = 7\text{cm}$ , angle  $STU = 45^\circ$  and  $TUS = 75^\circ$ . (4 marks)

b) Measure the length  $TU =$  \_\_\_\_\_ (1 mark)

28. A commercial farmer borrowed some money from a village SACCO who offer loans at an interest rate of  $1\frac{1}{5}\%$  per month for a period of 2 years.

a) How much did he borrow if he paid a total interest of sh. 144,000? (3 marks)

b) Calculate the amount of money he paid back to the village SACCO at the end of the two years. (2 marks)

29.a) Solve:  $5r - 2(r + 1) = 1$ . (2 marks)

b) Mary is 8 years younger than Daniel now. Their total age is 18 years. How old is Mary? (2 marks)

30. The ratio of the interior angle to the exterior angle of a regular polygon is 7:2.

a) How many sides has the polygon? (2 marks)

b) Calculate the interior angle sum of the polygon. (2 marks)

31. Town M is 60km East of town A. Town L is on a bearing of  $120^\circ$  from town M a distance of 50km.

a) Draw a rough sketch showing the location of the above towns. (1 mark)

- b) Draw an accurate diagram showing the three towns, taking a scale of 1cm rep. 10km. (3 marks)

- c) What is the shortest distance between town A and town L? (1 mark)

32. A motorist travelled at a speed of 60km/h to cover a journey from his village to the city in only 4 hours. On her way back to the village, she reduced the speed by 50% due to heavy rainfall.

Calculate the motorist average speed for the whole journey in km/h. (4 marks)

**\*\*\*THE END\*\*\***