



UNEB BLUE PRINT 2023

MATHEMATICS (SET FIVE)

Time allowed: 2 Hours 30 Minutes

Index no:

Random No					Personal No		

Candidate's name:

Candidate's signature:

School:

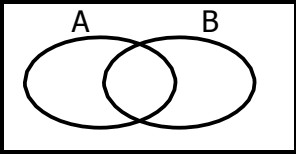
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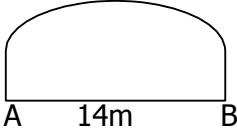
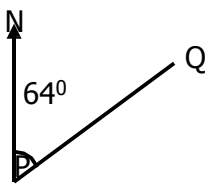
Read the following instructions carefully

1. This paper is made up of two sections: **A** and **B**.
2. Section **A** has **20** questions (**40 marks**).
3. Section **B** has **12** questions (**60 marks**).
4. Answer ALL questions in both sections **A** and **B**.
5. All answers **MUST** be written in the space provided In blue or black ball point pens or ink. All diagrams Should be in pencil.
6. Unnecessary crossing of answers will lead to loss of Marks.
7. Poor hand writing which cannot be easily read, May lead to loss of marks.

FOR EXAMINERS' USE ONLY		
Qn.No	MARKS	SIGN
1-10		
11-20		
21-22		
23-24		
25-26		
27-28		
29 - 30		
31 - 32		
TOTAL		

SECTION A:40 MARKS**Questions 1 to 20 carry two marks each**

1.	Work out: $37 - 26$	2.	Write "five thousand sixty two" in figures.
3.	Simplify: $-9 - -12$	4.	Shade A^1 in the 
5.	Change $\frac{2}{5}$ into decimal.	6.	In a P.7 class, there are 34 boys and 27 girls. Find the probability of selecting a girl as a class prefect.
7.	Find the next number in the sequence. 1, 2, 6, 15, 31, _____	8.	At Jeffrey forex bureau, 1US dollar(\$) = sh3650. Imran has 240US dollars which he exchanged into Uganda shillings, how much did he get?
9.	How many grams are in 1.2kg?	10.	In $m = 6$, $n = 5$ and $p = 4$, find the value of $\frac{m - 2n}{p}$

11.	Find the number whose standard form is 6.45×10^{-2}	12.	Change 25_{ten} to binary base.
13.	Grace started her journey at 11:36am and reached her destination at 12:10pm. How long was the journey?	14.	Using a ruler, a pencil and a pair of compasses only, construct 105°
15.	Calculate the perimeter of the figure below. 	16.	9 women take 8 days to weed a garden. How many days will 12 women take to weed the same garden?
17.	Simplify: $\frac{a+b}{2} + \frac{a+2b}{3}$	18.	In the figure below, find the bearing of town P from town Q. 
19.	Find the least number of pupils that can share 24 oranges or 32 oranges without leaving a remainder.	20.	The average mass of 6 students was 63kg. When one student left the group, the average mass of the remaining student became 64. What was the mass of the sixth student?

SECTION B: 60 MARKS

21. a) Find the quotient of the value of 9 and the value of 5 in 49056. (3mks)

b) How many groups of 100 are in the value of 7 in 87130? (2mks)

22. The table below shows Mr. Okumu's shopping bill.

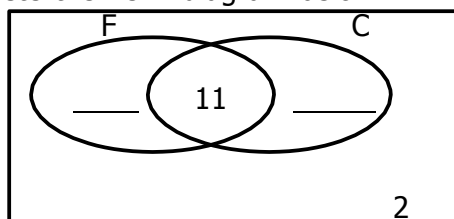
Item	Quantity	Unit cost	Total cost
Sugar	4kg	Sh.4800	Sh._____
Salt	1 ½ kg	Sh._____	Sh.3600
Cooking oil	_____ litres	Sh.8800	Sh.2200
	Total Expenditure		Sh._____

a) Complete the table above. (4mks)

b) If he paid sh.23,000, calculate the percentage discount. (2mks)

23. At a party, y guests ate Fish (F) only, $(y+4)$ ate Chicken (C), but not fish. 11 guests ate both types of sauce while 2 did not eat any of the sauce.

a) Complete the Venn diagram below.

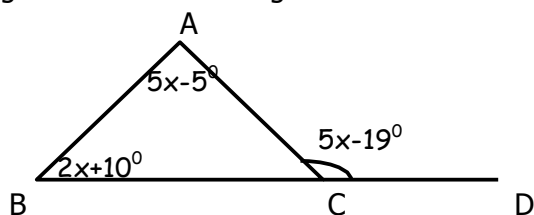


	<p>b) If 22 guests ate only one type of sauce, find the value of y. (2mks)</p> <p>c) How many guests attended the party? (1mk)</p>
24.	<p>a) Using a ruler, a pencil and a pair of compasses only, construct a parallelogram ABCD in which AB = 7cm, BC = 6cm and angle ABC = 120°. (4mks)</p> <p>b) Measure diagonal AC = _____cm (1mk)</p>
25.	<p>a) Simplify: $\frac{1.8 \times 3.9}{0.9 \times 1.3}$ (3mks)</p> <p>b) Simplify: $2\frac{1}{4} \div 1\frac{7}{20} \times 3\frac{3}{5}$ (3mks)</p>

26. Twenty two poles were fixed around a circular fish pond.
- a) Find the diameter of the pond if the interval between the poles was 6 metres.
(take $\pi = \frac{22}{7}$) (3mks)

b) Calculate the area of the pond. (2mks)

27. The figure below is a triangle ABC.

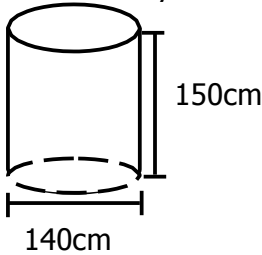


a) Find the value of x. (2mks)

b) Calculate the size of angle ACB. (3mks)

28. The time table below is of a bus from Kampala to Mbarara.

Town	Arrival	Departure
Kampala		10:30am
Mpigi	11:30am	11:35am
Masaka	12:35pm	12:45pm
Lyantonde	1:25pm	1:30pm
Mbarara	3:30pm	

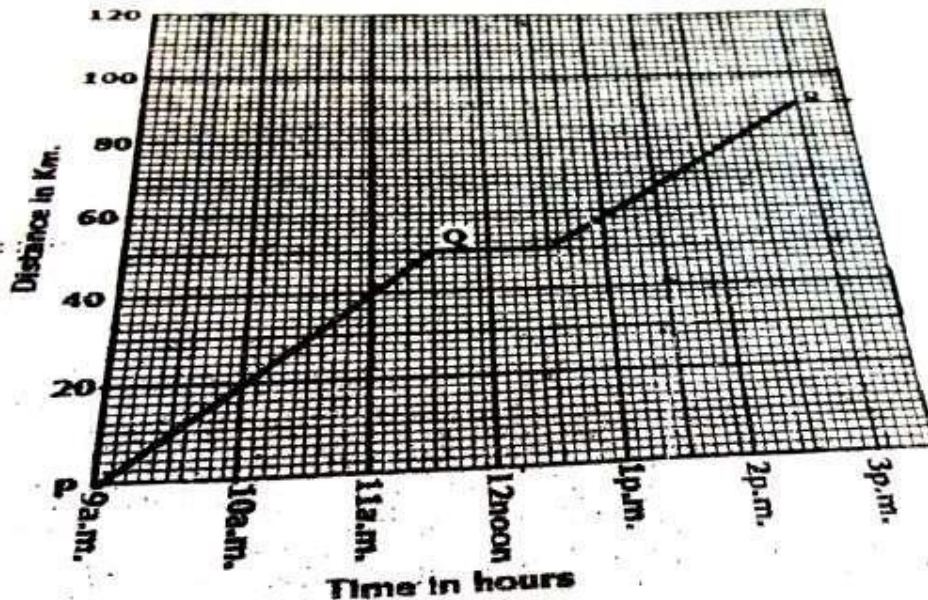
	<p>a) Find the time taken from Masaka to Lyantonde. (2mks)</p> <p>b) What is the total time taken from Kampala to Mbarara? (2mks)</p> <p>c) Calculate the average speed of the bus for the whole journey if the distance from Kampala to Mbarara is 300km.</p>
29.	<p>Kamonde sold a radio set to Yasmin for sh600,000 making a profit of 20%. Yasmin then sold the same radio set to Mwambu making a loss of 15%.</p> <p>a) How much did Kamonde buy the radio set? (3mks)</p> <p>b) Calculate the loss made by Yasmin. (2mks)</p>
30.	<p>The figure shows a cylindrical metallic tank of height 150cm.</p>  <p>a) Calculate its volume ($\pi = \frac{22}{7}$) (2mks)</p>

b) What is its capacity?

(2mks)

31. A mother is six times as old as her daughter. In 6 years' time, she will be four times as old as her daughter. How old is each of them? (4mks)

32. The graph below shows the journey made by a cyclist from town P to town R via town Q. Use it to answer the questions that follow.



a) How far is town Q from town P?

(1mk)

b) For how long does the cyclist stop at town Q?

(1mk)

c) Calculate the average speed of the cyclist for the whole journey. (2mks)

End