BUSIA DISTRICT ACADEMIC BOARD

P.7 MOCK ASSESSMENT 2024

SUBJECT : **MATHEMATICS**
CLASS : **PRIMARY SEVEN**
DURATION : **2 HOURS 30 MINUTES**

Index No.	Random 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 FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper is made up of two sections A and B.
2. Section A has 40 questions (40 marks)
3. Section B has 15 questions (60 marks)
4. Answer ALL questions. All answers to both section A and B must be written in the spaces provided.
5. All answers must be written using a blue or black ball-point pen or ink.
6. Unnecessary alteration of work may 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 boxes indicated For Examiner's use only

FOR EXAMINERS' USE ONLY

PAGES	MARKS	SIGN
Page 1		
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

Turn Over

SECTION A

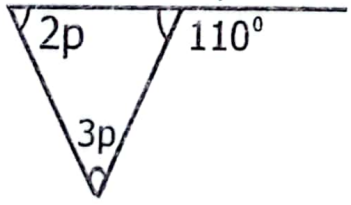
1. Subtract:
   1 7 8
   - 1 5 6

2. Write XCIV in hindu arabic numerals.

3. Calculate the greatest common divisor of 15 and 18.

4. Given that set p= {▭, △, ○, ▱}
   set k={○, ▱, ▭, △}
   What is the relationship between set p and set k?

5. Find the value of p in the diagram.

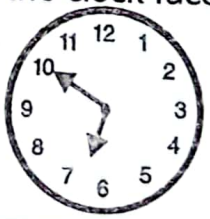


6. Express 0.00423 in scientific notation.

7. Solve 3k + 4 = 10.

8. Using a ruler, a pencil and a pair of compasses only, Construct an angle of 120°.

9. Tell the morning time shown on the clock face below.



10. A car uses 6 litres of petrol to travel 30km. How many litres are required to travel 45km?

11. A boy planted 10 pegs along the circumference of a circular field at a distance of 30cm apart. Find the total distance round the circular field.

12. A trader bought 20 mangoes for shs. 8000 and sold each mango at sh. 500. How much profit did he get after selling all the mangoes?

13. A dice is tossed once. Find the probability that a prime number appears on top.

14. Convert 6000mL to litres.

15. Add: $111_{two} + 11_{two.}$

16. Express $\frac{3}{8}$ as a percentage.

17. Arrange : $^{-}5, ^{+}2, ^{-}3, 2$ and $^{+}3$ in descending order.

18. Simplify: $(4p + k) + (K + 4p)$

19. Work out:

Kg	g
4	450
+ 20	750

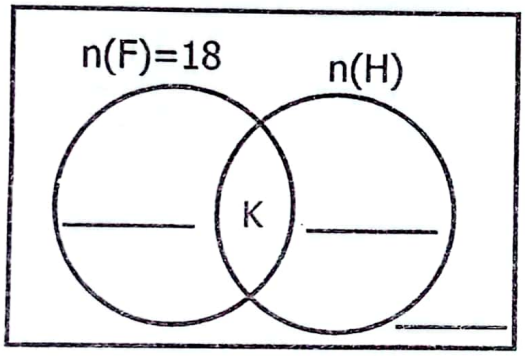
20 Find the next number in the sequence below.

25 , 22 , 24 , 21 , 23 , _____

SECTION B

21. In a club, 18 players like football (F), (16 - k) like Hockey (H) but not football while 4 players like neither of the two games.

a) Use the above information to complete the Venn diagram below

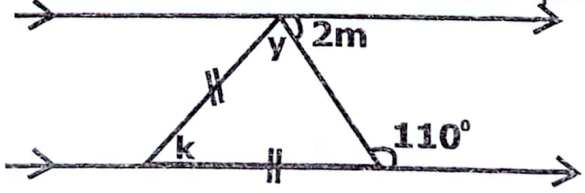


(3marks)

b) Find the value of K given that the number of players who don't like football is 9.

(2marks)

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



Find the value of ;

i) y

(2marks)

ii) K

(2mks)

iii) M

(2mks)

23.a) Change 13_{ten} to binary base .

(2mks)

b) Give that $1111_{two} = 30p$. Find the base P.

(3mks)

24. Mr. Wafula went to the market with sh. 20,000 note and bought the following items.
- 2kgs of onions at sh.3000 each kg.
- $1\frac{1}{2}$ kgs of salt at sh.4000 each kg.
- 10 tomatoes at sh.500 for every two tomatoes.
- 500mL of cooking oil at sh. 8000 per litre.

a) What was his total expenditure.

(5mks)

b) Find his change.

(1mks)

25. a) Simplify: $\frac{1}{3} + \frac{2}{5}$

(2mks)

b) In Pioneer P/S 100 pupils sat for PLE 2023.
Given that $\frac{2}{5}$ of the pupils were boys and the rest were girls.
How many girls sat for PLE?

(3mks)

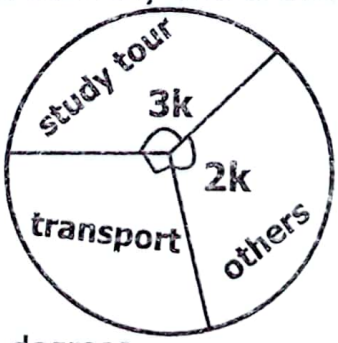
26.a) Solve for x : 2(x-2) =6

(2mks)

b). Given that a = 2 and b = $^{-}$3. Evaluate.
$^{-}a^2 - ab$

(2mks)

27. The pie chart below shows how Okumu spent his pocket money of sh. 108,000. Study it carefully and answer the questions that follow.

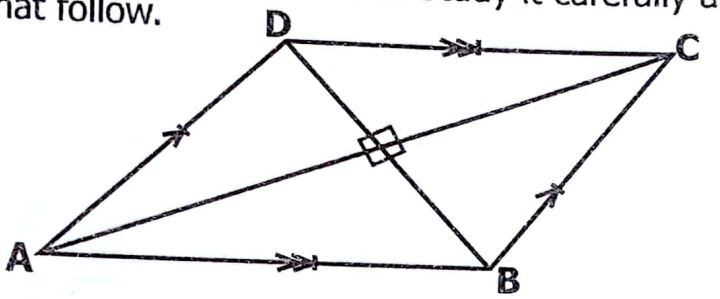


a) Find the value of K in degrees. (3marks)

b) How much more did he spend on study Tour than on others?

(2marks)

28. The figure below is a Rhombus ABC where diagonal BD is 6cm and the length of each side is 5cm. Study it carefully and answer the questions that follow.



i) Calculate the length of diagonal AC.

(3marks)

ii) Calculate the area of the Rhombus ABCD.

(2marks)

29. With the help of a ruler, pencil and a pair of compasses only. Construct a triangle PUK where line PU = 6cm, angle UPK = 30° and angle PUK = 105°. Drop a perpendicular line from K to meet $\overline{PU}$ at M.(4marks)

i) Measure KM.

(1mark)

30. In a fish factory, there are 20% more female workers than male workers. Given that female workers are 90.

a) Calculate the total number of workers in the factory.

(3mks)

b) How many more female workers than male workers are in the fish factory?

(2mks)

31. The average of K , 6 , 9 , 5 , (K+1) and 9 is 15.

a) Find the value of K.

(3mks)

b) Find the median of the numbers.

(2mks)

32. Johnny left town A to town B driving at a speed of 60km/hr. He then drove back at a speed of 90km/hr. Calculate the distance between town A and town B given that the total time taken was 5 hours. (4mks)