KAMWENGE DISTRICT ACADEMIC BOARD

PRIMARY LEAVING EXAMINATION MOCK 2023

MATHEMATICS

Time Allowed : 2 hours 30 minutes

Random No.						Personal No.		

CANDIDATE'S NAME: .....

CANDIDATE'S SIGNATURE. .....

SCHOOL EMIS NO. .....

SUB - COUNTY: .....

Read the following instructions carefully.

1. The paper is made up of two sections A and B.
   Section A has 20 short answer questions(40 marks).
   Section B has 12 questions (60 marks).
2. Answer all questions. All working and answers for both sections A and B must be shown in the spaces provided.
3. 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.
4. No calculators are allowed in the examination room.
5. Unnecessary changes in your work and handwriting that can not be read easily may lead to loss of marks.
6. Do not fill anything in the table indicated: "**FOR EXAMINERS' USE ONLY**" and boxes inside the question paper.

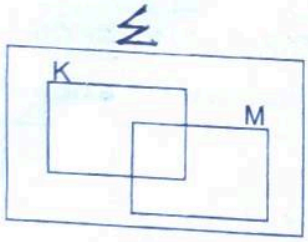
FOR OFFICIAL USE ONLY		
Qn. No.	**MARKS**	**EXR'S NAME**
1 - 7		
8 - 14		
15 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A (2 marks each)

1. Divide: 15 ÷ 15 =

2. Write "Two thousand twenty three" in figures.

3. In the diagram below, shade the complement of set K.



4. Complete the sequence below;

1, 8, 27, 64, _____, _____

5. Convert 1500 grams to kilograms.

6. Solve: 2p - 5 = 1

7. Add: 12 + 1.56

8. Change 1011_{two} to base ten.

9. Nuwagaba is expected to sit for his PLE Mock examinations this year. If the probability of passing is $\frac{3}{5}$. Find the probability of him failing examinations.

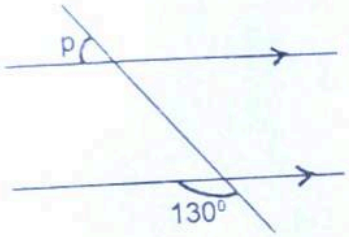
10. Express the evening time shown on the clock face in 24 hours.

11. If set A is a set of prime numbers less than 10; How many subsets has set A?

12. Express 4 0 3. 8 7 in standard form.

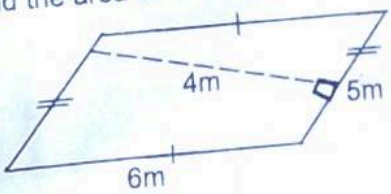
13. Given that x = y = 4
Find the value of $x^2 + y^6$.

14. Find the size of p.



15. Decrease 400 goats in the ratio of 5: 8

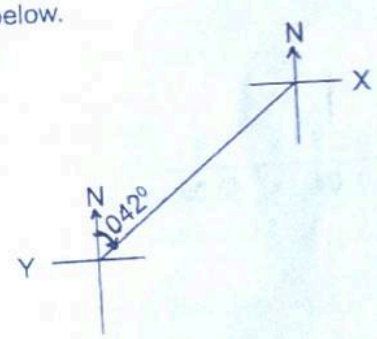
16. Find the area of the quadrilateral below



17. What smallest number is exactly divisible by 12 and 20 ?

18. Isaac was born in 15 BC and married in 19 AD. How old was he when he married?

19. The bearing of X from Y is 042°. Find the bearing of Y from X in the diagram below.



20. Given that US $ 1 = UGx 3700; Convert 481,000 Uganda shillings to United States Dollars (US $).

SECTION A (60 MKS)

21(a) What is the place value of 4 in the number ?

2403_{six} (1 mk)

(b) Find the value of Y;

$106_{Y} = 67_{eight}$ (3 mks)

22. Work out:

(a) $\frac{1}{2} - \frac{2}{3} + \frac{1}{4}$. (2 mks)

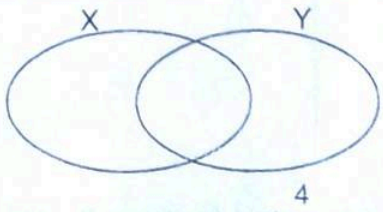
(b) $\frac{0.25 \times 1.6}{0.04 \times 0.05}$ (3 mks)

23. Given that;

Prime factors of X are $\{2_1, 2_2, 2_3, 3_1\}$ and

Prime factors of Y are $\{2^2, \times 3^2\}$.

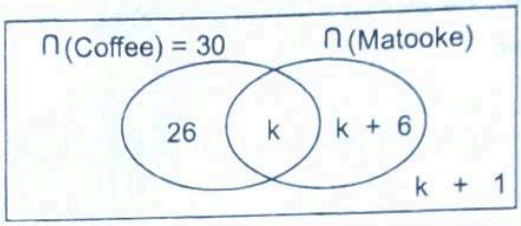
(a) Show the prime factors on the venn diagram below. (3 mks)



(b) Find the G. C. F of X and Y. (1 mk)

(c) Find the L.C.M of X and Y. (1 mk)

24. The venn diagram below shows number of farmers who benefited from PDM programme that grow Coffee, Matooke and other crops.



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

(b) How many farmers grow matooke only? (1 mk)

(c) How many farmers benefited from PDM funds? (2 mks)

25(a) Using a pencil, a ruler and a pair of compasses, construct a triangle MTN where MT = 6cm, angle MTN = 60^0 and line TN = 4. 5cm, drop a perpendicular line from N to meet MT at P. (5 mks)

(b) Using NP as height, find the area of the triangle MTN. (1 mk)

26. Rinnah sits in the 10^{th} position from the right and 5^{th} from the left of the same straight line.

(a) Find the total mumber of pupils in the line. (2 mks)

(b) If the distance between one another in the straight line is 30cm; find the total length of the line in metres. (2 mks)

(c) What is the additive inverse of $^{-}4$. (2 mks)

27. The table below shows rates at which foreign currency is exchanged at Post bank Kamwenge.

Currency	rate in Ug shillings.
1 US dollar ($)	Ug.sh 3,600
1 Kenya shillings (K.sh)	Ug.sh 30
1 Pound sterling	Ug.sh 3,800

(a) Hpow much can one get in ug. shillings if he has 350 US dollars. (2 mks)

(b) How much can Joshua get in Kenya shillings if he has 300 Pound sterling?
(3 mks)

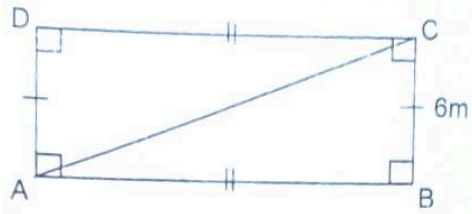
28. Simple left Y at 7: 00 am and reached Z at 11: 00 am driving at a steady speed of 90km / hr. She stayed at Z for 2 hours and drove back to Y at a speed of 60km / hr.
(a) What distance is between Y and Z?
(2 mks)

(b) Calculate the average speed for the whole journey in metres per second (M / s).
(3 mks)

29. A taxi was to carry a total of 24 passengers in 3 trips; It carried 3 more passengers in every trip than the previous one. How many passengers did it carry in the last trip?
(4 mks)

30. Tap A and Tap B are used to fill a tank while Tap C is used to empty the same tank. Tap A alone fills the tank in 24 minutes, Tap B takes 30 minutes to fill the tank and Tap C empties the same tank in 40 minutes. If all the three taps are opened at the same time; how long will the tank take to be filled?
(4 mks)

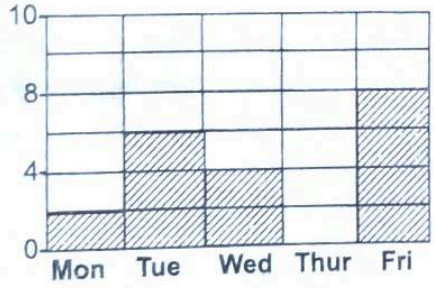
31. The perimeter of the rectangle below is 28m. Study it carefully and answer questions about it.



(a) Find the length of diagonal AC. (3 mks)

(b) Find the area of triangle ADC. (2 mks)

32. The graph below shows the number of absentees in a P. 7 class of 60 pupils at Nkarakara Primary School.



(a) How many pupils were absent on Tuesday? (1 mk

(b) How many pupils were present on Friday? (2 mks)

(c) Calculate the average attendance for the whole week. (3 mks)

 END