UGANDA MUSLIM TEACHERS' ASSOCIATION
UMTA JOINT MOCK PRIMARY LEAVING EXAMINATIONS 2023
MATHEMATICS

2 HOURS 30 MINUTES

INDEX NUMBER									

NAME...SIGN...............................

SCHOOL...DISTRICT.....................

Instructions to candidates:

Do not open this Booklet until you are told to do so.

- The paper has two Sections **A** and **B**.

- Answer all questions in sections **A** and **B** in the spaces provided.

- All answers must be written in Blue or Black pen or Ink.

- Unnecessary changes (crossings) or alternation of answers may lead to loss of marks.

- Any handwriting that cannot easily be read may lead to loss of marks.

- The use of calculators or other mathematical tables is not allowed.

- Do not fill anything in the boxes indicated for "Examiners use only"

FOR EXAMINERS' USE ONLY

QN.	MARKS	INITIAL
SECA		
1 – 05		
06 – 10		
11 – 15		
16 – 20		
SEC B		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

SECTION A

1. Work out $28 \div 4$

2. Write 54,045 in words.

3. Simplify $3a - 2b - a + 5b$.

4. Find the sum of the first three rectangular numbers.

5. The time shown on the clock face below is in the afternoon, write it in 24 -hour clock.

6. Given that set M = {Prime numbers less than 15}

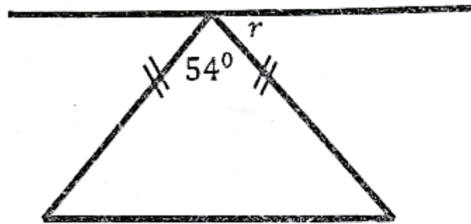 N = {Odd numbers between 0 and 15}

   Find $n(M \cap N)$

7. Simplify $\frac{3}{5} \times \frac{6}{27}$

8. Use distribute property work out $(18 \times 19) + (19 \times 22)$

9. Work out the median 1, -2, 3, -3, 4, and 3

10. Express $2\frac{1}{5}$ metres as centimeters.

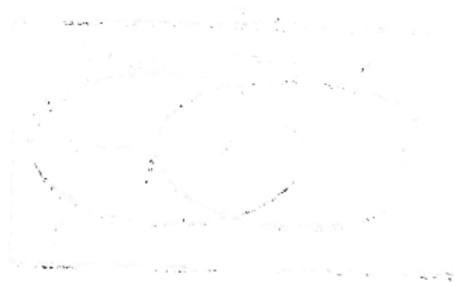11. Find the value of r in the diagram below.

12. Simplify $-3 - +5$

13. Find the least number of pens that a teacher can give to pupils in her class among 5 girls and 6 boys and there is a remainder of 3 pens.

14. Solve $5-3r \leq 17$

15. Ten men take 12 days to dig a garden. Find the number of more men working at the same rate needed to dig the same garden in 8 days.

16. Using a pair of compasses, a ruler and a pencil only, construct an angle of 105°.

17. A shopkeeper bought $3\frac{1}{3}$ dozen of books and sold each book at sh.900. Find the total amount of money the shopkeeper got after selling all the books.

18. Find the radius of a circle whose circumference is 3080 metres (use $\pi = \frac{22}{7}$)

19. Express 18 Kilometres per hour as metres per second.
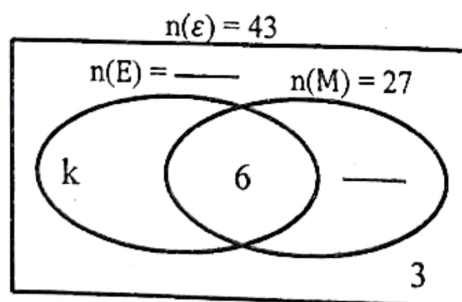
20. Find the next number in the sequence.

11, 14, 17, 19, 21, 24, _____

SECTION B

(60 MARKS)

21. 43 pupils attended lessons in a P.7 Class,27 pupils like Mathematics(M), K pupils like English(E) only,6 pupils like both subjects while 3 pupils did not like any of the two subjects.

(a) Use the information given above to complete the venn diagram below. (02 marks)

$n(\varepsilon) = 43$

$n(E) =$ ___ $n(M) = 27$

k   6   ___

3

(b) Find the probability of picking a pupil who likes English. (03 marks)

22.(a) State the place value of 3 in the number.

342$_{six}$

(01 mark)

(b) Expand 1101$_{six}$ in base two using exponents.

(02 marks)

(c) Express 344$_{five}$ as base ten.

(02 marks)

23. Study and complete Matovu's shopping bill table below (06 marks)

Item	Quantity	Unit cost	Amount
Rice	30kg	Sh_____per kg	Sh. 144,000
Posho	_____kg	Sh. 4,000 per kg	Sh. 2000
Cooking oil	2500ml	Sh. 15,000 per half litre	Sh_____
Flasks	10 flasks	Sh_____per flask	Sh_____
Total expenditure			Sh. 341,000

24. (a) Express $\frac{5}{11}$ as a recurring decimal

(02 marks)

(b) Change 0.2777… into a vulgar fraction (02 marks)
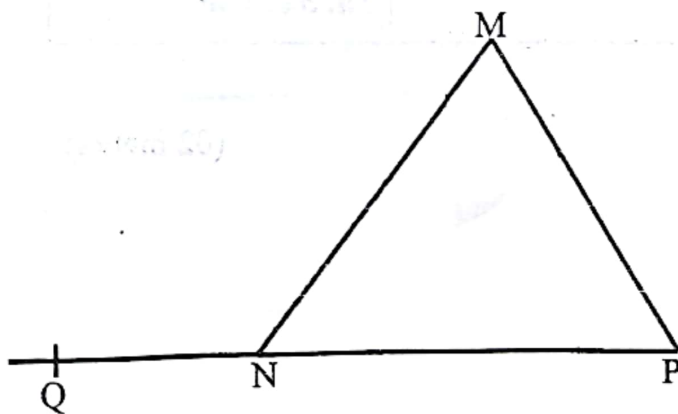
(c) Express 0.05 as a simplified fraction. (01 mark)

25. A box containing 2 dozens of books weighs 9.6kg, If the box when empty weighs 2.4kg. Find the weight of each book in grammes. (04 marks)

26. Given that MN=PN, angle MNQ= $(7t-50)°$ and angle MPN=$(t+20)°$

(a) Find the value of **t**. (02 marks)

(b) Find the size of the angle marked MNP.

(02 marks)

27. A taxi reached Mbale from Iganga at 3:20pm, If the journey took 100 minutes.

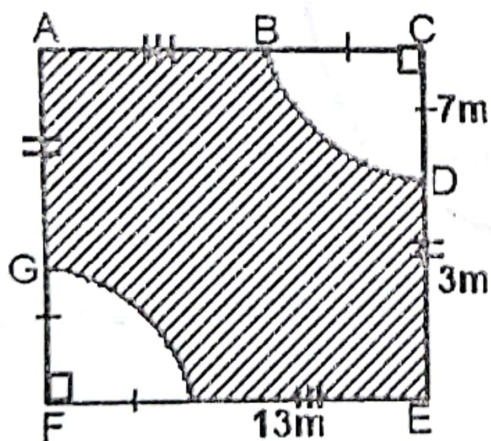(a) At what time did the taxi leave Iganga?

(03 marks)

(b) If the distance from Iganga to Mbale is 150km, find the average speed of the taxi in metres per second.

(03 marks)

28. Find the perimeter of the shaded part (Use $\pi = \frac{22}{7}$)
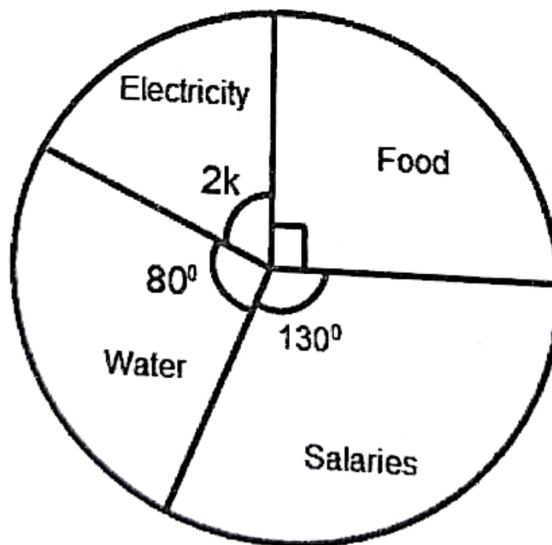
(04 marks)

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29. A school Bursar has a four digit number for her ATM "pin". The first digit is half of the second digit, the sum of the second and third digit is 10, the fourth digit is equal to the second digit plus one. If the sum of the four digits is 23. Find the digits. (05 marks)

30. The pie-chart below shows how a school spends money on various items.

(a) Find the value of K.

(02 marks).

(c) If a school spends sh. 240,000 on electricity, how much more money does the school spend on salaries than food? (04 marks)

31. In a school of 3600 pupils, the ratio of boys to girls is 2:4. One day 20% of the boys and 25% of the girls were absent. If 7 books were given to each pupil present, find the number of books given out altogether on that day. (05 marks)

32. (a) Using a pair of compasses, a ruler and a pencil only construct a triangle ABC in which BC=7cm ,angle BCA=45° and angle ABC=60°,drop a perpendicular bisector from point A to meet line **BC** at **E**.   (04 marks)

(b) Measure the length of line **AE.**   (01 mark)

END