# KALUNGU DISTRICT PRIMARY LEAVING MOCK EXAMINATION - 2023

## MATHEMATICS

**Time allowed: 2hours 30 minutes**

School: _____

| EMIS No. | | | | | | Personal No. | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

Candidate's Name: _____

Candidate's Signature: _____

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY**

1. This paper has two sections **A** and **B**.
2. Section **A**, has **20** short questions (40 marks). Section **B** has **12** questions (60 marks)
3. Answer all questions.
4. All answers to all questions must be written in the spaces provided.
5. All answers must be written using **blue** or **black** ball pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary crossing of work will 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 Examiner's Use Only;

| QUESTIONS | MARKS | INITIALS |
|---|---|---|
| 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 (40Marks)

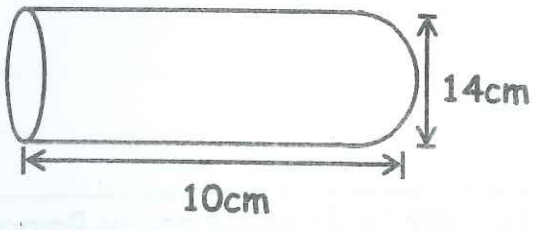
| | | | |
|---|---|---|---|
| 1. | Work out:<br><br>$\begin{array}{r} 3\ 4\ 6 \\ +\ 2\ 2 \\ \hline \end{array}$ | 2. | Given that set;<br>$A = \{1, 2, 3, 4, 5, 6, 7\}$<br>and set $B = \{1, 3, 5, 6, 7, 8\}$<br>Find $n(A \cap B)$ |
| 3. | Round off 3069 to the nearest hundreds. | 4. | Find the next number in the sequence below;<br><br>30, 28, 25, 20, _____ |
| 5. | A trader bought 10 $\frac{1}{2}$ kg of sugar and packed in $\frac{1}{2}$ kg packets. How many packets did the trader pack? | | |
| 6. | Find the additive inverse of -11. | | |

7. Using a pair of compasses, a ruler and a pencil only, construct an angle of $135^0$.

8. Given that; a = 3 and b = $\frac{1}{6}$

Work out: a ÷ b

9. Calculate the base area of the figure below.




10. Write the time shown on the watch below in words.


11. Annet came from England with 52 Euros. Given that 1E = Ug. Sh. 3750. How much money did she get in Uganda shillings?

12. The median of 2, 3, a, 4, 5 and 6 is 4 as they are arranged. Find the value of a.

| | | | |
|---|---|---|---|
| 13. | 2 metres of a cloth make 5 shirts. How many metres of the cloth will be needed to make 20 shirts? | | |
| 14. | Solve for n: $2^{2n} \times 2 = 32$. | | |
| 15. | Judith is 15 years older than her sister. Write Judith's age in Roman numeral if the sister is 14 years old. | | |
| 16. | A regular polygon has 12 right angles. Name the polygon. | | |
| 17. | Solve for y: $2y - 4 = 6$ | 18 | Express 2800g as kg |

19. Work out:

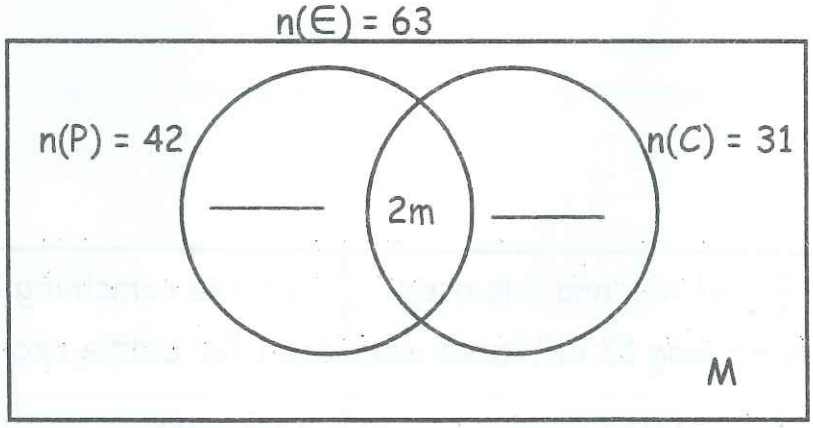
| WKS | DAYS. |
|---|---|
| 7 | 4 |
| - 1 | 6 |

20. If  represents 17 oranges. How many oranges will be represented by  ?

## SECTION: B

21. In a class of 63 candidates, 42 enjoy Potatoes (P), 31 enjoy Cassava (C), 2m candidates enjoy both Potatoes and Cassava while M enjoys other food stuffs.

(a) Use the above information to complete the Venn diagram. **(2marks)**

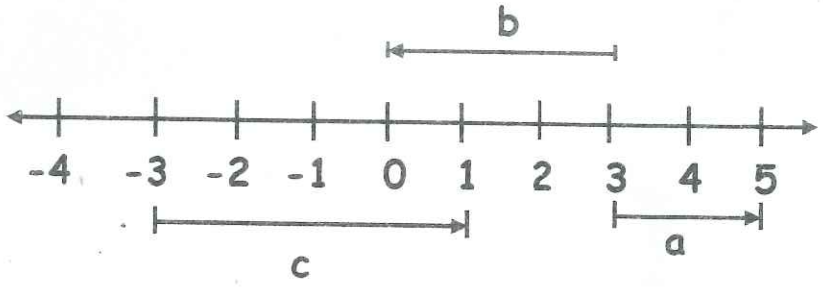



(b) Find the value of M. **(2marks)**

| | |
|---|---|
| 22. | Catherine went to the market with two ten thousand shillings notes and bought the following items.<br>- 500gms of salt at sh. 2000 per kg.<br>- 2 tins of Omo at sh. 3500 each.<br>- 24 oranges at sh. 1200 for a heap of six oranges.<br>(a) Find the total expenditure. **(4marks)**<br><br>(b) Work out her change. **(1mark)** |
| 23. | A land dealer sold $\frac{1}{5}$ of his land. He used $\frac{2}{5}$ of the remaining land for cultivation. The remaining 12 hectares were used for cattle rearing.<br>(a) Find the fraction for cattle rearing. **(3marks)** |

23. (b) How big was his land? **(2marks)**

24. Use the numberline below to answer the questions about it.




(a) Name the integers represented by arrows. **(3marks)**

(i) a =

(ii) b =

(iii) c =

(b) Work out the sum of integers a and c. **(2marks)**

| | | |
|---|---|---|
| 25. | Given that $58_k = 104_{seven}$, find the value of k. **(3marks)** | |
| | (b) Find the sum of value of 4 and value of 3 in 3549. **(3marks)** | |
| 26. | (a) Solve $5t - 2(t + 1) = 4$ **(3marks)** | (b) Solve the inequality $-2p + 4 > 6$ **(2marks)** |

27. (a) Using a pair of compasses, a ruler and a sharp pencil, construct a triangle ABC where line AB = 7cm, $< BAC = 60^{0}$ and $< ABC = 45^{0}$

**(4marks)**

(b) Measure angle C _____ **(1mark)**

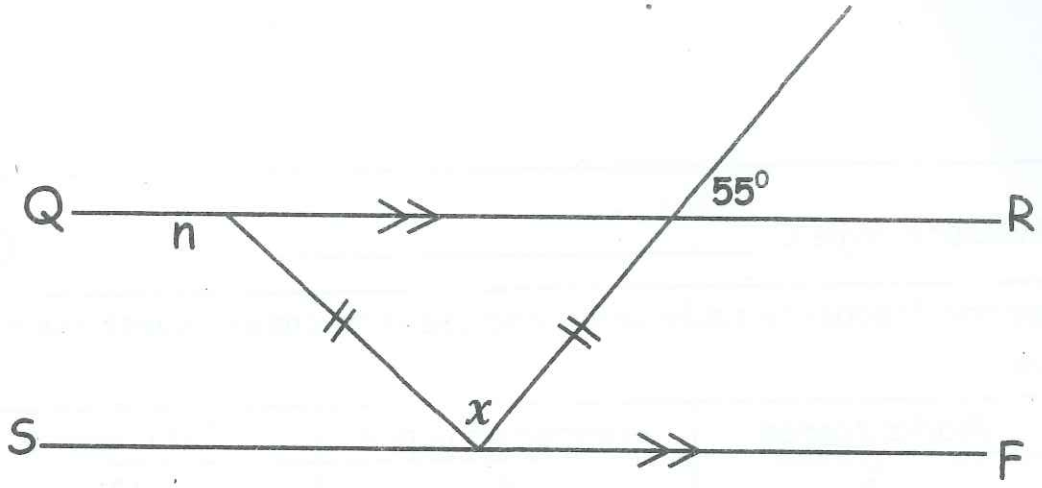
28. Study the frequency table below and use it to answer questions that follow.

| Marks scored | Number of pupils | Total marks |
|---|---|---|
| 3 | 4 | 12 |
| _____ | 7 | 28 |
| 5 | _____ | 30 |
| 6 | 3 | _____ |

(a) Complete the above table. **(3marks)**

(b) Find the average mark scored. **(2marks)**

29. The diagram below shows $\overline{QR}$ parallel to $\overline{SF}$. Use it to answer questions about it.




(a) Find the value of x. **(3marks)**

| | |
|---|---|
| | (b) Work out the size of angle n. **(2marks)** |
| 30. | John harvested 300 bags of groundnuts each weighing 100kg.<br>(a) How many tonnes of groundnuts did he harvest? **(3marks)** |
| | (b) If the groundnuts were packed in 25kg bags for export, how many bags were exported? **(2marks)** |

31. Two patients take their medication after 45 minutes and 40 minutes respectively. If they take their first medication at 8:00a.m.

(a) After how many minutes will they take their medication again? **(2marks)**

(b) At what time will they take their second medication again. **(3marks)**

32. Given that; $X = 3Y - 4$, complete the table below. **(5marks)**

| X | -4 | -1 | _____ | 2 | -3 | _____ |
|---|---|---|---|---|---|---|
| Y | 0 | _____ | -2 | _____ | _____ | -1 |

**END**