

# MASAKA DISTRICT ACADEMIC BOARD

## PRIMARY LEAVING MOCK

### EXAMINATIONS – 2023

#### MATHEMATICS

Time: 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).
3. Section B has 12 questions (60 marks)
4. Answer all questions.
5. All answers to all questions must be written in the spaces provided.
6. All answers must be written using blue or black ball pen or ink. Diagrams should be drawn in pencil.
7. Unnecessary crossing of work will lead to loss of marks.
8. Any handwriting that cannot easily be read may lead to loss of marks.
9. Do not fill anything in the boxes indicated "FOR EXAMINER'S USE ONLY".

For Examiner's Use Only;



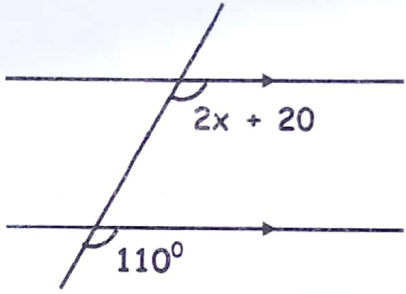
QN. No.	MARKS	INITIALS
1 - 5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29 - 30		
31-32		
Total		

Turn over

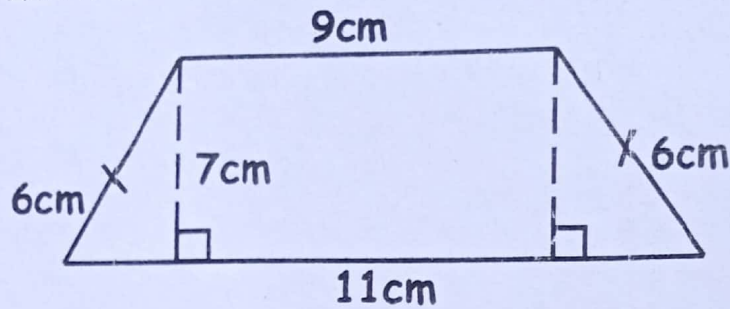
# SECTION: A

1.	Work out: $32 \times 3$	2.	Express: DXCIV in Hindu Arabic numerals.
3.	Given that set $R = \{ \text{All prime numbers less than 10} \}$ Find $n(R)$		
4.	Work out $2 - 5 = \underline{\hspace{2cm}}$ (Finite 7)		
5.	Given that: $x = 3$ and $y = 7$ Evaluate: $\sqrt{3x + y}$	6.	Using a pair of compass, a ruler and a pencil. Construct an angle of $135^\circ$ .



7.	<p>Use distributive law to work out  <math>(17 \div 4) + (23 \div 4)</math></p>
8.	<p>Given that  cost shs. 1000.          Find the cost of </p>
9.	<div> <div data-bbox="102 913 746 1630"> <p>Work out: <math>1\frac{1}{3} - \frac{3}{4}</math></p> </div> <div data-bbox="746 913 1378 1630"> <p>10. Find the value of x.</p>  </div> </div>
11.	<p>Chelengant ran through 48km in 45 minutes. Find his average speed in Km/hr.</p>

12. Work out the area of the figure below.



13. Find the next two numbers in the sequence.

4, 6, 8, 9, \_\_\_\_\_, \_\_\_\_\_

14. Nalwoga borrowed sh. 72,000 from a PE-WOSA Club at an interest rate of 15% monthly.

How much simple interest did she pay after 3 months?

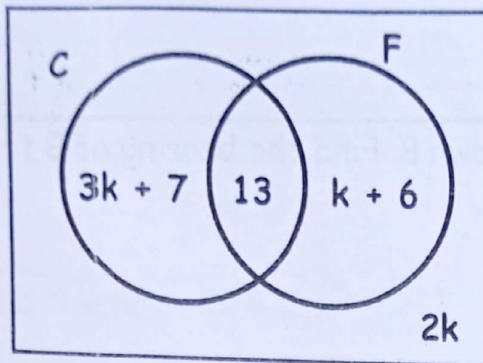
15. Calculate the radius of a circle whose perimeter is 88cm.  $\left[ \text{Use } \pi = \frac{22}{7} \right]$

16.	Work out: <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">Weeks</td> <td style="text-align: right;">Days</td> </tr> <tr> <td style="text-align: right;">2</td> <td style="text-align: right;">3</td> </tr> <tr> <td style="text-align: right;">+ 4</td> <td style="text-align: right;">5</td> </tr> <tr> <td style="border-top: 1px solid black;"></td> <td style="border-top: 1px solid black;"></td> </tr> </table>		Weeks	Days	2	3	+ 4	5		
Weeks	Days									
2	3									
+ 4	5									
17.	Town C is on a bearing of $130^\circ$ from town B. Find the bearing of B from C.									
18.	In a school of 540 pupils, the ratio of girls to boys is 3:2. How many girls are in the school?									
19.	Find the number that is expanded to give: $(3 \times 10^2) + (6 \times 10^0) + (7 \times 10^{-2})$	20. The temperature of an ice block was $-18^\circ\text{F}$ in the morning. By noon it was $-8^\circ\text{F}$ . What was the rise in temperature?								



# SECTION: B

21. At a baptism party, guests were served with fish and chicken as shown below.



- a) If 27 guests did not eat fish, find the value of k. (2mks)

- b) How many guests attended the party altogether? (2mks)

- c) If a guest is chosen to lead prayers, what is the probability that a guest chosen ate both sauce? (1mk)

22. Work out:

(a)  $\frac{3.9 + 3.3}{0.6 \times 0.4}$  (3mks)

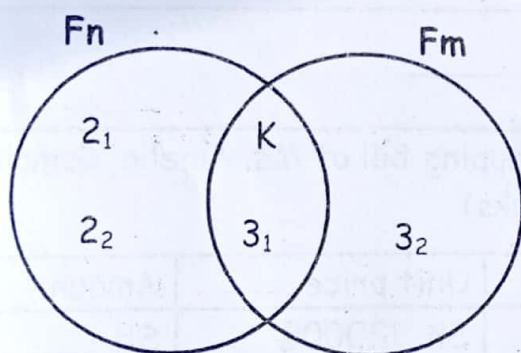
- (b) Express 0.3636..... as a simplified fraction. (2mks)

23. Anita, Anabelo and Amos shared a certain amount of money in the ratio 3:4:5 respectively, Anitta got sh. 80,000 less than what Amos got.

a) How much did they share altogether? (3mks)

b) What percentage of the total share did Anabelo get? (2mks)

24. Two numbers  $m$  and  $n$  were prime factorised as shown in the diagram below.



a) If the HCF of  $m$  and  $n$  is 15. Find the value of  $K$ . (2mks)

b) Find the sum of  $m$  and  $n$ . (3marks)

25. Using a ruler, a pencil and a pair of compasses, construct a triangle KLM where  $\angle KLM = 45^\circ$ ,  $\overline{LM} = 7.5\text{cm}$  and  $\overline{KL} = 6\text{cm}$ . (4mks)

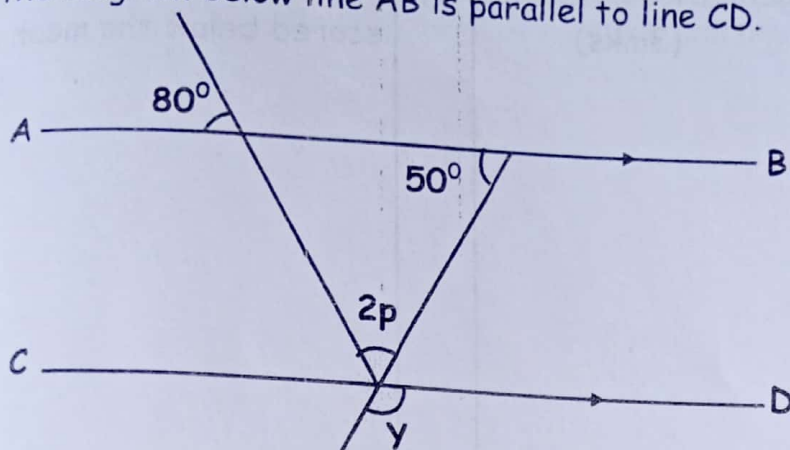
- b) Measure angle KML \_\_\_\_\_ (1mk)

26. The table below represents the shopping bill of Ms. Amelia. Complete it correctly. (5mks)

Item	Quantity	Unit price	Amount
Meat	$2 \frac{1}{2}$ kg	Sh. 12000@	Sh. _____
Rice	$3 \frac{1}{4}$ kg	_____	Sh. 13000
Cooking oil	_____	Sh. 8000@	Sh. 6000
Maize flour	1500gms	Sh. 2000 a kg	Sh. _____
Total	_____	_____	Sh. _____



27. In the diagram below line AB is parallel to line CD.



a) Find the value of  $p$ .

(2mks)

b) Find angle  $y$ .

(2mks)

28. The table below shows the marks for pupils in the Pre-registration test.

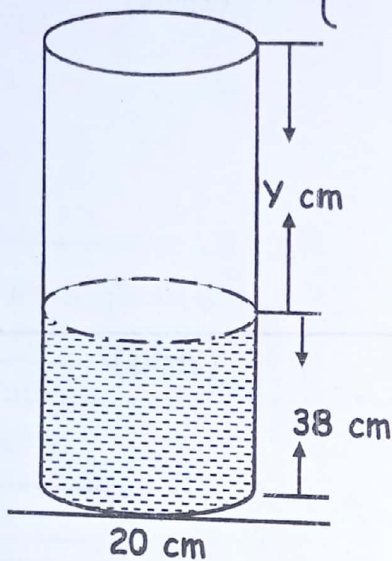
Marks	70	80	90	60
No. of pupils	8	4	2	6

a) Find the number of pupils who did the test. (1mk)

b) Find the average mark for the class. (3mks)

c) What percentage of the class scored below the mean mark? (1mk)

29. The cylindrical tank below holds 22 litres of water when full. Find the value of  $y$ . (Take  $\pi = \frac{22}{7}$ ) (4mks)

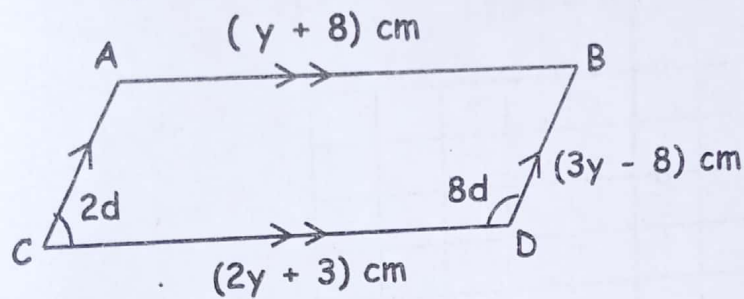


30. A driver left Kampala for Masaka at a speed of 60km/hr and took 4 hours to reach Masaka. At 3:00pm, he drove back to Kampala at a steady speed of 80km/hr.
- a) At what time did the driver reach Kampala? (3mks)

b) Calculate the average speed for the whole journey. (3mks)



Use the figure below to answer questions that follow.



a) Work out the value of  $y$ . (2mks)

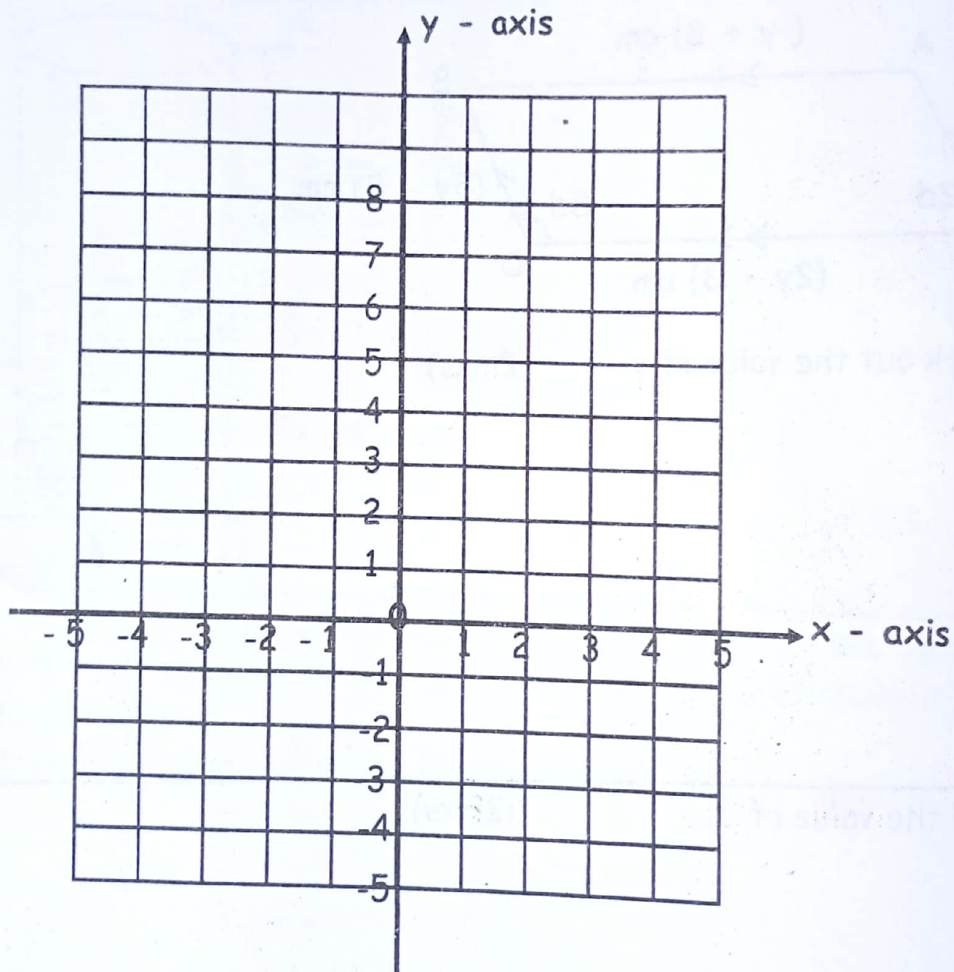
b) Find the value of  $d$ . (2mks)



c) What is the size of angle BAC in degrees?

(1mk)

32. On the grid below, plot the following co-ordinates. P (0, +5), Q (4, 5), R (2, 1), S (-2, 1) (4mks)



- (a) Join the points and name the quadrilateral formed .

(1mk)



END