ASSOCIATION OF CATHOLIC EDUCATION INSTITUTIONS (ACEI) - MASAKA DIOCESE

PRE - PLE EXAMINATION– 2023

MATHEMATICS

Time allowed: 2hours 30 minutes

School EMIS.						Personal No.		

Candidate's Name : _____

Candidate's Signature : _____

School Name : _____

District Name : _____

Read the following instructions carefully.

1. This paper has two sections: **A** and **B.**
2. Section **A** has **20** questions (40 marks)
3. Section **B** has **12** questions (**60** marks)
4. Answer **ALL** questions. All answers to both sections **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. 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 – 10		
11 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

Turn Over

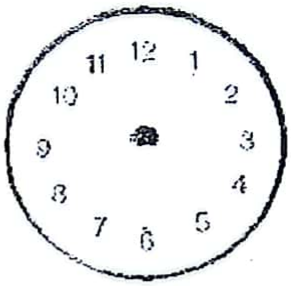
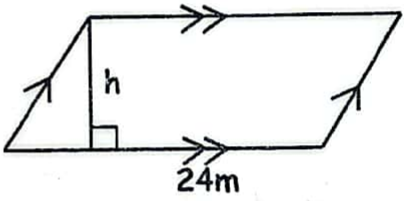
CamScanner

SECTION: A

1.	Work out: $\begin{array}{r} 1\ 1 \\ \times\ 7 \\ \hline \\ \hline \end{array}$	2.	Given that $Q = \{t, e, a, r, s\}$ and $R = \{a, e, i, o, u\}$. Find $n(R-Q)$
3.	Find the next number in the sequence below: 93, 92, 89, 83, 73, _____		
4.	Find the value of 8 hundreds.		
5.	Work out: $^{-}7 + {}^{+}4$	6.	Given that 12 men take 5 days to clear a piece of land. How many men are needed to clear the same piece of land in 15 days?

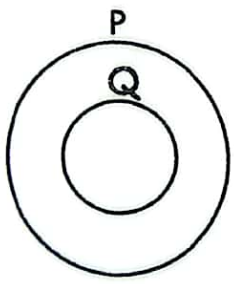
@ Association of Catholic Education Institution (ACEI) - Masaka Diocese

CamScanner

7.	A regular polygon has 8 triangles. Name the polygon.	8.	Show Twenty -five minutes to mid day on the clock face below. 
9.	Given that P = 2, q = 4 and r = 0 Find the value of $\frac{qr}{p}$	10.	The area of the figure below $120m^2$, find the value of h. 
11.	The average weight of 3 girls is 50kg. If the total weight of 2 girls is 102 kg. calculate the weight of the third girl.		

@ Association of Catholic Education Institution (ACEI) – Masaka Diocese

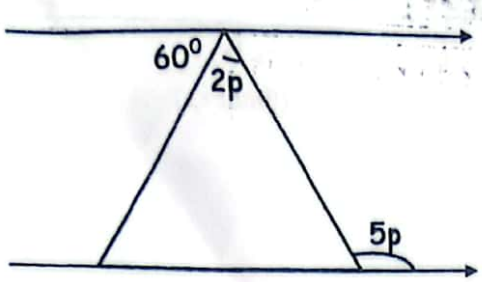
CamScanner

12.	Jane was given a bundle of two thousand shilling notes amounting to one hundred thousand shillings. Find how many notes were in her bundle.		
13.	Using distributive property only, work out; $\left(\frac{3}{4} \times 133\right) - \left(\frac{3}{4} \times 98\right)$		
14.	Given the diagram below shade $P \cap Q$ 	15.	John's father is 59 years old. Write his age in Roman Numerals
16.	Work out the square root of 0.25		

@ Association of Catholic Education Institution (ACEI) - Masaka Diocese

CamScanner

17. In the diagram below. Find the value of P in degrees.



18. How many packets of OMO each weighing 250g can be obtained from a 2kg bucket full of OMO?

19. Write 17068 in words.

20. A mathematics lesson started at 11:30a.m and ended at 1:15p.m. Find how long was the lesson?

@ Association of Catholic Education Institution (ACEI) – Masaka Diocese

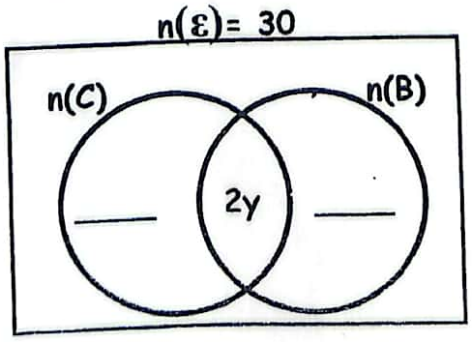
SECTION: B

21. The median of four consecutive odd numbers is 8.
Find the numbers. (5marks)

22. (a) Workout: $\frac{0.8 - 0.24}{0.4 \times 0.2}$ (3mks)

(b) Simplify: $\frac{5}{6} \div \frac{1}{2} \times \frac{1}{3}$ (2mks)

23. In a village of 30 farmers. 18 farmers grow Cassava (C), (3y - 3) farmers grow Beans (B) only, 2y farmers grow both Cassava and Beans.
(a) Present the above information on a Venn diagram. (2mks)



© Association of Catholic Education Institution (ACEI) – Masaka Diocese

CamScanner

(b) Find how many farmers grow both Cassava and Beans? (3mrks)

24. The table below shows Maria's shopping bill.

Item	Unit cost	Total cost
3kg of sugar	Sh. 3600	Sh. _____
_____kg of rice	Sh. 4200	Sh. 10500
500gm of salt	Sh. _____	Sh. 700
Total		Sh. _____

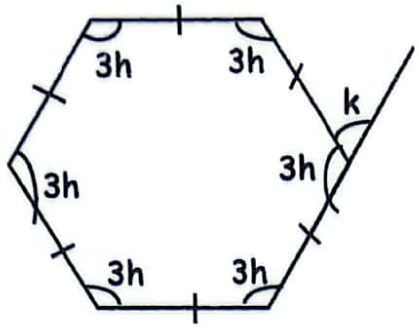
(a) Complete the table above. (4mks)

(b) If Maria paid Sh. 19,800 after being given a discount. What was her percentage discount? (2mks)

@ Association of Catholic Education Institution (ACEI) – Masaka Diocese

CamScanner

25. Study the diagram below and use it to answer questions that follow.



(a) Find the value of h. (3mks)

(b) Calculate the size of angle k. (2mks)

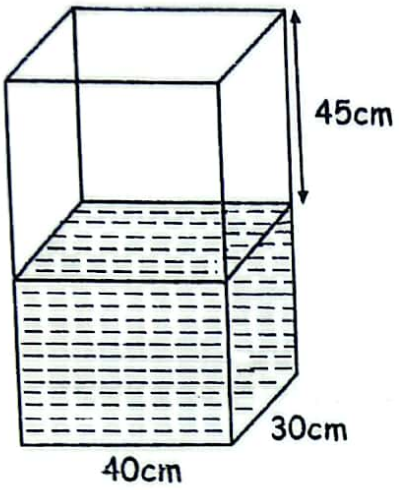
26. (a) Work out: $111_{two} + 110_{two}$ (2mks)

b) Express 123_{four} as decimal base. (2mks)

@ Association of Catholic Education Institution (ACEI) – Masaka Diocese

CamScanner

27. The diagram below shows a rectangular tank a farmer uses to collect his milk from the cows.

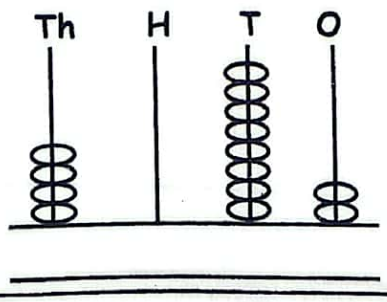


(a) If the tank is $\frac{1}{4}$ full of milk. Find the height of the full tank. (2mks)

(b) How many litres of milk are in the tank now? (3mks)

28. (a) Solve for x: $3(3x - 3) = 18$ (3mks)

CamScanner

	(b) Peter is 12cm taller than Jane. If the sum of their heights is 48cm. Find Jane's height. (2mks)
29.	A trader deposited Sh. 800,000 in a bank for 9months at a simple interest rate of 10% per year. (a) Find how much interest the trader got. (3mks)
	(b) Work out the total amount of money a trader will earn after that period. (2mks)
30.	Study the abacus below and use it to answer the questions that follow. (a) Complete the abacus below. (1mk) 

@ Association of Catholic Education Institution (ACEI) – Masaka Diocese

CamScanner

	(b) Write the number represented on the abacus above in expanded form using exponents. (2mks)
	(c) Express the above number in scientific notation. (2mks)
31.	A taxi driver leaves station Masaka at 9:45a.m. and reaches Kampala station at 2:15p.m. If he was driving at a speed of 40km/h. (a) Calculate the distance between the two stations. (3mks)

© Association of Catholic Education Institution (ACEI) –Masaka Diocese

CamScanner

(b) If he returned using $1\frac{1}{2}$ hours from Kampala to Masaka. What was his average speed for a whole journey? (2mks)

32. Primary Seven candidates of a certain school were asked to tell the favourite sodas when they went for a tour as the table below shows.

Type of soda	Fanta	Mirinda	Novida
No. of children	30	20	40

Use a radius of 3.5cm to present the above information on a well labelled Pie-chart. (5mks)

END

CamScanner