

MPIGI DISTRICT ACADEMIC BOARD

PRE - PLE EXAMINATIONS 2023

MATHEMATICS

PRIMARY SEVEN

Time Allowed: 2 Hours 30 Minutes

Index No.	Personal No.
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Pupil's Name : _____

Pupil's Signature: _____

School Name: _____

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. The paper is made up of two sections: A & B.
2. Section A has 20 questions (40 marks)
3. Section B has 12 questions (60 marks)
4. Answer **ALL** questions in both sections A & B
5. All answers must be written in the spaces provided in

BLUE or **BLACK** ink. Only diagrams should be drawn in

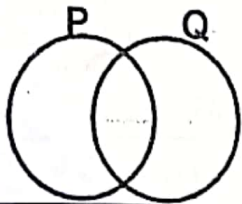
pencil.
6. Unnecessary crossing of work will lead to loss of marks.
7. Poor handwriting, which cannot be easily read may lead

to loss of marks.
8. Do not fill anything in the boxes shown.

FOR EXAMINERS' USE ONLY

PAGES.	MARKS	EXAMINER'S INITIALS
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION: A (40 MARKS)

<p>1. Work out; $22 + 13$</p>	<p>7. Work out: $\frac{0.2 \times 0.32}{0.16}$</p>						
<p>2. Write 20095 in words.</p>	<p>8. With the help of a ruler, a sharp pencil and a pair of compasses only, Construct an angle of 45° in the space below.</p>						
<p>3. Express 96 in Roman Numerals</p>	<p>9. The rates at which Centenary Bank buys and sells United States dollars are given in the table below.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="text-align: left;">Unit Currency</th> <th style="text-align: center;">Buying rate in Ugsh</th> <th style="text-align: center;">Selling rate in Ug sh</th> </tr> </thead> <tbody> <tr> <td>1US dollar (\$)</td> <td style="text-align: center;">3700</td> <td style="text-align: center;">3800</td> </tr> </tbody> </table> <p>A tourist from United States toured Queen Elizabeth National park in Uganda and bought a watch at \$ 10. How much did the tourist pay in Uganda shillings?</p>	Unit Currency	Buying rate in Ugsh	Selling rate in Ug sh	1US dollar (\$)	3700	3800
Unit Currency	Buying rate in Ugsh	Selling rate in Ug sh					
1US dollar (\$)	3700	3800					
<p>4. Simplify: $-6 - -8$.</p>							
<p>5. Find the next number in the sequence. 2, 3, 7, 16, 32, _____.</p>							
<p>6. In the diagram below, shade the region that represents $P \cup Q - P$.</p> <div style="text-align: center; margin-top: 20px;">  </div>							

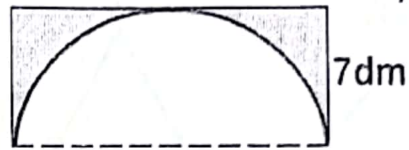
10. Write the afternoon time shown on the clock face below in 24 hour clock time.



11. A car uses 6 litres of petrol to cover 30km. How many litres of petrol will be needed to travel 100km?

12. A taxi left at 7:00am and arrived at 9:30am covering a distance of 200kms. Calculate the average speed for the journey covered.

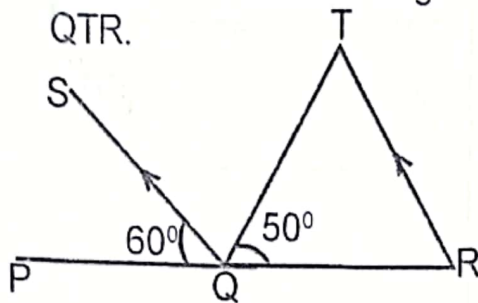
13. Calculate the perimeter of the figure below. (Take $\pi = \frac{22}{7}$)



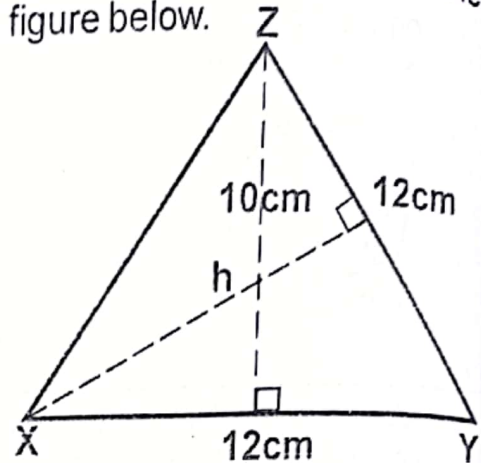
14. Solve the inequality: $2 - 3y \leq 11$

15. Amooti deposited Sh.600,000 in a bank that offers an interest rate of 10% per annum. Find how much interest he got after 8 months.

16. In the figure, QS is parallel to RT and PQR is a straight line. Find the size of angle QTR.



19. Find the height marked h in the figure below.

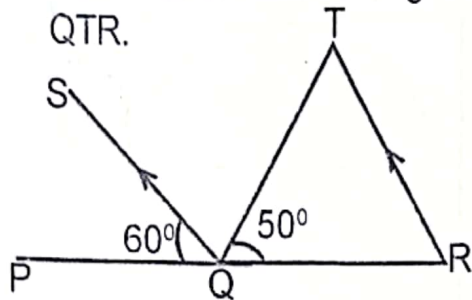


17. Subtract $x + 2$ from $2x - 2$

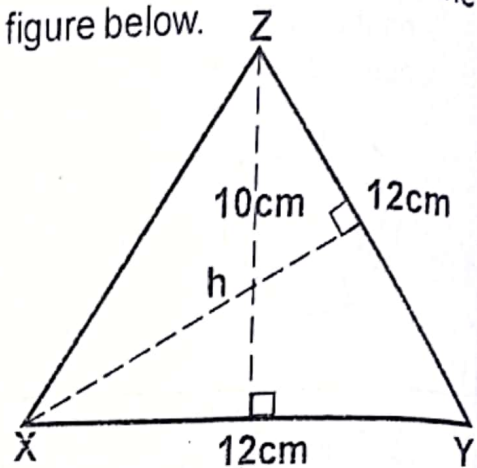
18. Namutebi sold a book at Sh. 5000 and made a loss of Sh. 1000. Find the price at which he bought the book.

20. Moses did a series of Mathematics tests and scored marks below; 55, 75, 60, 80, 60 and 90. Find his mean mark.

16. In the figure, QS is parallel to RT and PQR is a straight line. Find the size of angle QTR.



19. Find the height marked h in the figure below.



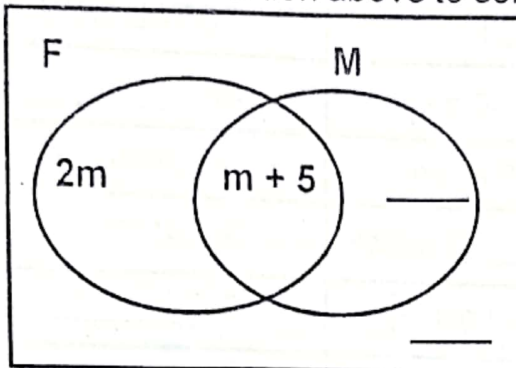
17. Subtract $x + 2$ from $2x - 2$

20. Moses did a series of Mathematics tests and scored marks below;
55, 75, 60, 80, 60 and 90.
Find his mean mark.

18. Namutebi sold a book at Sh. 5000 and made a loss of Sh. 1000. Find the price at which he bought the book.

SECTION: B (60 MARKS)

21. In a class, all pupils eat chicken (C), 20 pupils eat chicken and Fish (F), 25 pupils eat chicken and meat (M), $2m$ eat chicken and Fish only, $m + 5$ eat all the three types of food while 7 eat only chicken.
- a) Use the information above to complete the Venn diagram below. (2 Marks)



- b) Find the value of m .

(2 Marks)

- c) How many pupils are in the class?

(2 Marks)

22. A pupil wrote the following digits 4, 6, 0 and 7 on cards.

- a) Write the smallest 4 - digit number using each digit once.

(1 Mark)

- b) Form the largest 4 - digit number using each digit once.

(1 Mark)

- c) Find the sum of the largest and smallest numbers formed in (a) and (b) above.

(2 Marks)

23. Okello went to the market and bought the items as shown below.
a) Complete the table correctly. (5 Marks)

ITEM	QUANTITY	COST	TOTAL COST
Beef	3kg	Sh. 15000 a kg	Sh. _____
Cooking oil	_____ml	Sh.4000 a litre	Sh. 2000
Tomatoes	5 heaps	Sh _____ @ tomato	Sh. 4500
Rice	1½ kg	Sh. 5000 per kg	Sh. _____
TOTAL EXPENDITURE			Sh. _____

- b) If Okello was given a discount of 10 %. How much did he pay?

(1 Mark)

24. On a farm $\frac{1}{3}$ of the land is used for growing Millet, $\frac{3}{4}$ of the remainder is for growing Maize and the rest is for growing Bananas.

- a) What fraction of the land is used for growing Bananas?

(3 Marks)

- b) If 10 acres are used for growing Bananas, What is the total area of the farm?

(2 Marks)

- 25a) Using a pencil, a ruler and a pair of compasses only, construct a quadrilateral ABCD where $\overline{AB} = \overline{CD} = 8\text{cm}$, Angle DAB = 45° and $\overline{BC} = \overline{AD} = 5\text{cm}$.

Drop a perpendicular from D to meet AB at K.

(4 Marks)

- b) Measure length DK.

(1 Mark)

26. A teacher awarded 4 marks for every correct answer and deducted 2 marks for every wrong answer while marking a test. The test had 20 questions.

- a) Juma got 12 correct answers, how many marks did he get altogether?

(2 Marks)

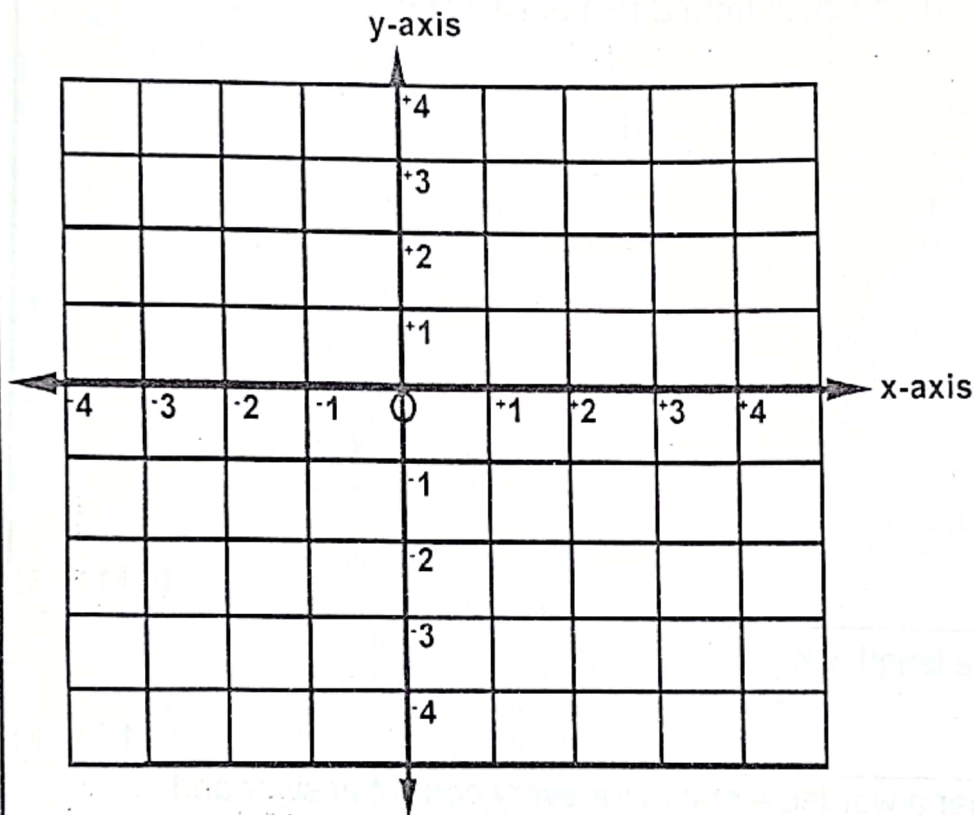
- b) If Jane got 50 marks, how many correct answers did she get?

(2 Marks)

27. On the graph below.

- a) Plot the following points;

$P(-3, +2)$, $Q(-3, -2)$, $R(+4, -2)$ and $S(+1, +2)$



(4 Marks)

- b) Join the points P to Q, Q to R, R to S and S to P.

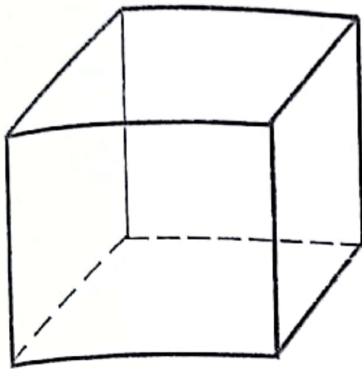
(1 Mark)

- c) Calculate the area of the figure formed in (b) above.

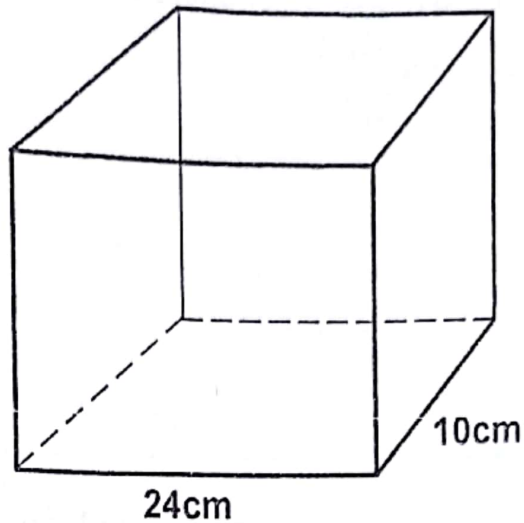
(1 Mark)

28. A rectangular container (A) holds 1.2 litres of liquid when full.

Container A



Container B



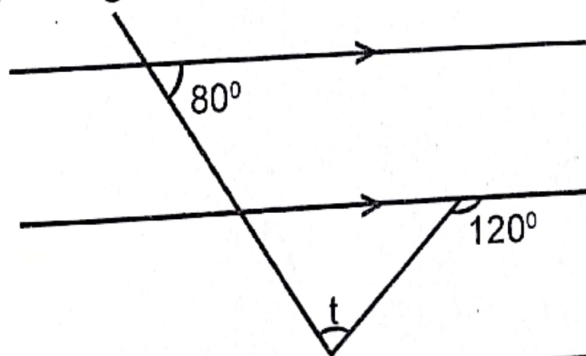
- a) How many cm^3 of liquid are there in container A?

(2 Marks)

- b) If the rectangular base of container B measures 24cm by 10cm. What is the height of the tank?

(3 Marks)

29. Study the figure and use it to answer the question below.



- a) Find the value of angle t

(3 Marks)

- b) The interior angle of a regular polygon is 90° more than its exterior angle. Calculate the size of the exterior angle.

(2 Marks)

30. **Kansiime left town X and travelled 40km east wards to town Y. She then left town Y and travelled 30km south wards to town Z.**
a) Draw a sketch diagram to show Kansiime's route.

(1 Mark)

- b) Construct an accurate diagram using a scale of 1cm to represent 10km showing Kansiime's route.

(3 Marks)

- c) Find the shortest distance in kms between towns X and Z.

(1 Mark)

31a) Solve for X: $3x - 2(x - 1) = 4$

(2 Marks)

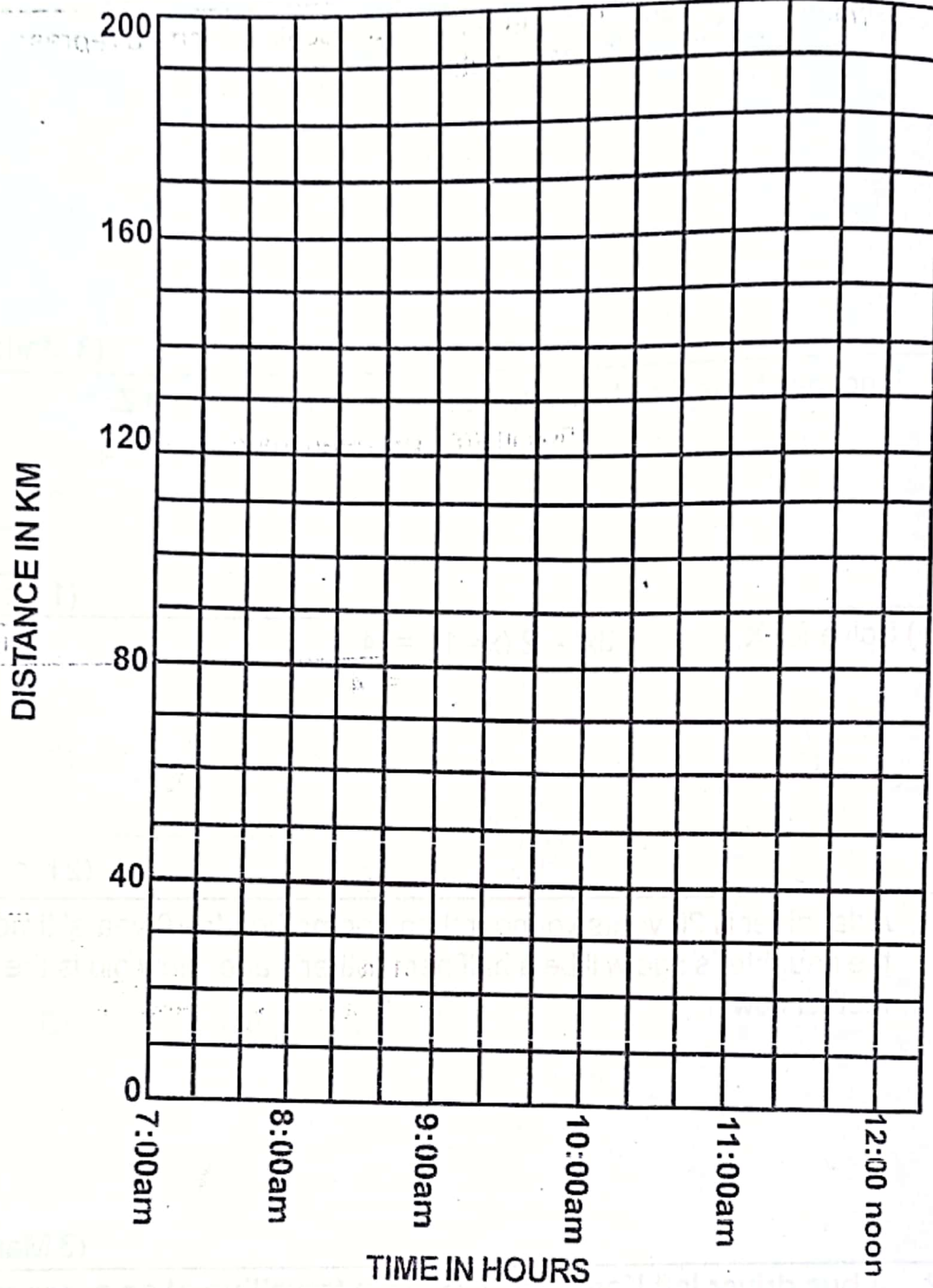
- b) A daughter is 20 years younger than her mother. In 10 years' time, the daughter's age will be a half her mother's age. How old is the mother now?

(3 Marks)

32. A bus driver left Kampala at 7:20 am travelling at an average speed of 50km/h for 2 hours to Iganga. He rested for 60 minutes at Iganga and then continued to Mbale covering a distance of 100km for another 2 hours.

- a) Show the above information on the graph below.

(4 Marks)



- b) Work out the driver's average speed while travelling.

(2 Marks)