



# RAPHA EXAMINATIONS BOARD

*" Education is an investment"*

P.7 STANDARD EXAMINATIONS SET **15**

## MATHEMATICS

*Time allowed: 2 Hours 15 Minutes*

Random No.						Personal No.		

**Candidate' Name:**.....

**Candidate's Signature:**.....

**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 a pencil.
6. **Unnecessary** changes in your work may lead to **loss** of marks.
7. Any handwriting that **cannot** be easily read may lead to **loss** of marks.
- 8.**Do not** fill anything in the table indicated: **" FOR EXAMINERS' USE ONLY"** and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No	MARKS	EXR'S No.
1 – 10		
11 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

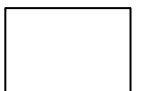
**TURN OVER**

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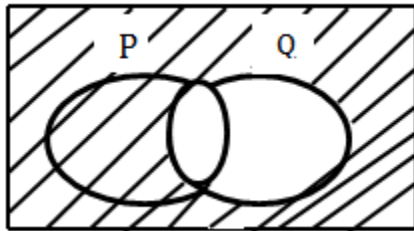
## SECTION A: 40 MARKS

Answer **all** questions **in** this section.  
Questions **1** to **20** carry **two** marks each.

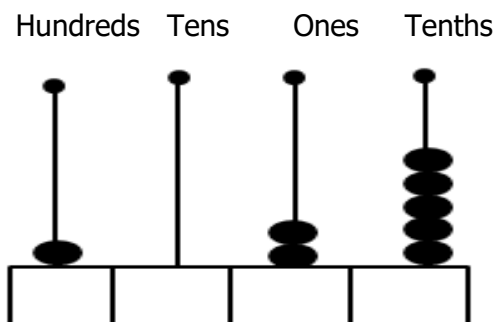
1. Find the reciprocal of  $\left(\frac{1}{4} + \frac{1}{3}\right)$
2. Determine the square root of the next number in the series below;  
0, 4, 10, 18, 27, \_\_\_\_\_
3. Write CXCIX in the Hindu Arabic format.
4. Solve the equation if  $Y=4$ ;  $PY + 2 = 10Y$
5. Use exponents to expand 94.06



6. Describe the shaded region



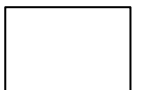
7. Write the number represented on the abacus in words



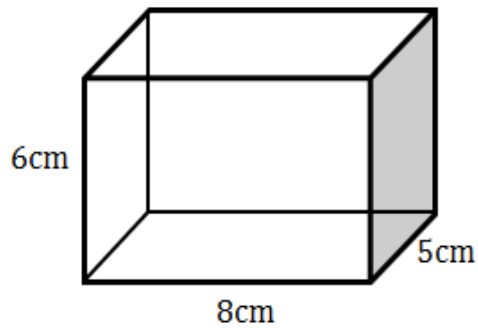
8. Find the cube root of 0.064.

9. Write in short:  $(6.4 \times 10^{-4})$

10. Calculate the distance covered in 9 seconds at an average speed of 40 meters in every second?



11. Work out the total surface area of the prism below if it has longer face off.



12. Musa made a profit of shs.4950 after buying a watch at shs.35900.  
Find the price he sold the watch at.

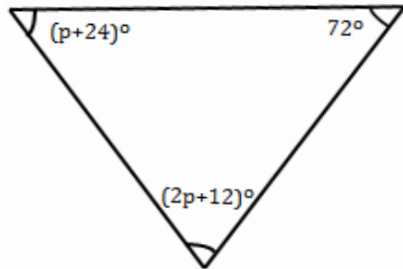
13. A meeting that lasted for 3.5hrs ended at 10:45am  
At what time did it kick start?

14. Convert  $\frac{7}{100}$  to a decimal.

15. Odama bought 120 shares from a village Sacco at an interest rate of 15% per annum. Each share costs shs.3000. Calculate the total amount Odama has after 2 years.

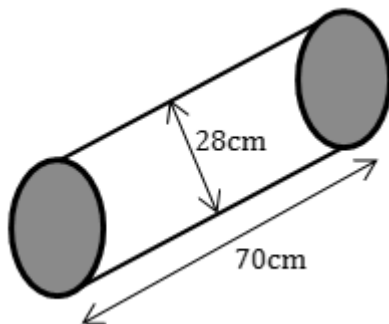


16. Find the value of  $p$  in the figure below.



17. If a tourist came from Britain with \$850. How much money would he get in Ugandan currency if a pound sterling is sold at shs.5350 and bought at shs.5180?

18. Find the total area of the shaded faces in the cylindrical tank below.



19. If  $a = 2$ ,  $b = 4$  and  $c = -3$ . Evaluate  $a(3b - c)$ .

20. Write 255220 in words.



**SECTION B: 60 MARKS**

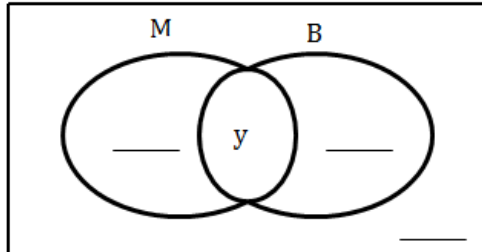
21. a) Angela is 3 years younger than Jovia. How old is Jovia if their total age is 33 years?

*(2 marks)*

b) Solve for X:  $2x + 5 \geq 20$

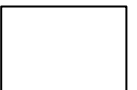
*(3 marks)*

22. a) In a school of 600 pupils, 350 like Matooke and 400 like Beans. No one prefers neither. Complete the Venn diagram below using the above information. (1 mark)

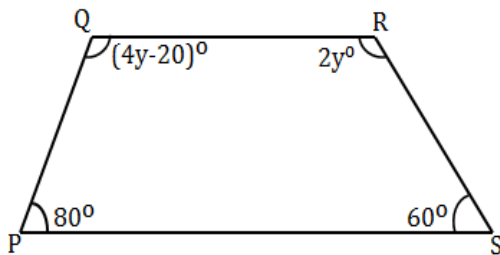


- b) Find the value of  $y$ . (2 marks)

- c) How many pupils like only one food stuff? (2 marks)



23. a) Name the quadrilateral below (1 mark)



- b) Find the size of angle PQR. (4 marks)

24. a) Kansime was to cover the floor of her house measuring 42m by 105m with square tiles 30cm each side.

How much money will she need to cover the floor with tiles costing shs.17,100 each? (5 marks)



25. Ronald spent 20% on clothing, 30% on food and  $\frac{1}{2}$  of the remainder on fees. If he saves shs.270.000, how much more money does he spend on food than fees ?

(5 marks)



26. The table below shows Fatuma's shopping bill.

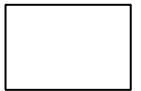
Item	Qty	Amount	Unit cost
Soap	4 bars	Sh.____	Sh 3,650
Coffee	2 tins	Sh.____	Sh 4,500
Beans	3 -kg	14,000	Sh.____
Sugar	____ gm	Sh.____	Sh. 3,200
Total Cost	_____	Sh. 40,000	_____

a) Complete the above table

*(5 marks)*

b) If she paid sh 37,500 for all the items, calculate her percentage discount

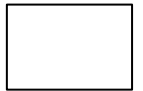
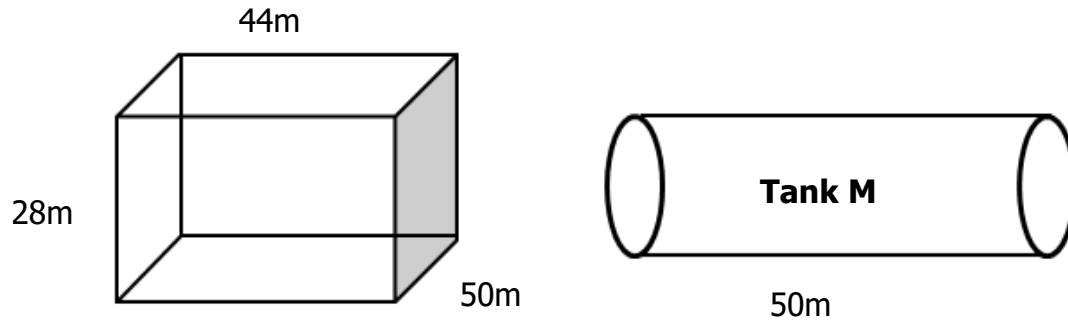
*(1 mark)*



27. Using a ruler, a pencil and a pair of compasses only. Construct a parallelogram PQRS where  $PQ = 7.3$  cm and  $QR = 5$  cm  $\angle PQR = 120^\circ$  and  $\angle QPS = 60^\circ$

*(5 marks)*

28. The tanks below hold the same amount of water when full. Find the diameter of tank M (4 marks)



29. a) 3 numbers are in the ratio of 4: 5: 6. If their LCM is 600, find their GCF (4 marks)

- b) Find the range of the numbers. (2 marks)

30. Copy and complete the table below given that  $y=3x - 5$ . (5 marks)

x	4	—	—	—	3
y	—	-2	—	-8	—

31. A man deposited sh. 700,000 in a bank but after 4 years, he withdrew a total of sh. 980,000. Calculate the interest rate. (4 marks)

32. a) There are 100kg of posho to last 20 days for 60 girls. How long will the same food last for 25 girls? (3 marks)

b) Decrease 6000 children by 33% then by 12% (3 marks)

**END**