



**SUCCESS INTEGRATED PRIMARY SCHOOL EXAMINATION**  
**SENATE**  
**PRE-PLE SET III EXAMINATIONS**  
**2022**  
**MATHEMATICS**

**PRIMARY SEVEN**

***Time Allowed: 2 hours 30 minutes***

Index No. : 

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Candidate's Name : .....

Candidate's Signature : .....

School Name : .....

District Name : .....

**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. All the working for both sections **A** and **B** must be shown in the spaces provided.
3. All working must be done using a blue or black ball-point pen or fountain pen. Any work done in pencil other than graphs, pictures and diagrams will **not** be marked.
4. **No calculators** are allowed in the examination room.
5. Unnecessary changes of work may lead to **loss** of marks.
6. Any handwriting that cannot easily be read may lead to **loss of marks**.
7. Do **not** fill anything in the boxes indicated:  
**"For Examiners' Use Only"**

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' IN.
1 – 5		
6 – 10		
11 – 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		

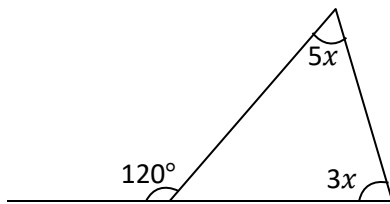
### SECTION A (40marks)

1. Workout:  $52 - 42$
2. Round off **29.99** to the nearest tenths.
3. Using a ruler, pencil and a pair of compasses only construct an angle of  $30^\circ$ .
4. Workout:  $2 - \frac{2}{3}$
5. Find the square of **0.09**.

6. What is the next number in the sequence: 1, 4, 9, 16, \_\_\_\_\_

7. Simplify:  $8 + 8 \div 8$ .

8. In the figure, find the value of  $x$ .



9. Write 3985 in scientific notation.

10. Express  $25\text{cm}$  as a percentage of  $5\text{m}$ .

11. Write 109 in Roman numerals.

12. Express 12: 25 $pm$  in a 24-hour clock system.

13. Simplify:  $2 - 3(P - 2)$

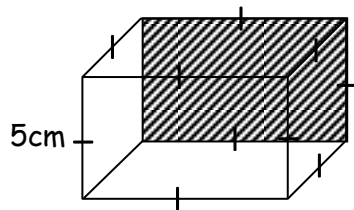
14. Seeta Junior will have a netball match with Mbuya Parents next week, what is the probability that Seeta Junior will win the match?

15. Solve:  $1 - 3 = w(\text{finite})$

16. Calculate the number of elements in a set with 16 subsets.

17. What mathematical property will make the statement  $2 + 7 + 8 = 2 + 8 + 7$  correct?

18. Workout the volume of the cube below.



19. Workout the mean of  $3p, 7, 3, 2p$  and 0.

20. Write a single number that has been expanded to give  $(8 \times 12^2) + (3 \times 10^0) + (5 \times 10^{-2})$

**SECTION B (60 marks)**

21. (a) Change  $\frac{1}{4}$  into a decimal fraction.

**(2 marks)**

(b) Simplify:  $\frac{0.18 + 1.82}{0.25}$

**(3 marks)**

22. The figure below is representing the magic square of 3 by 3. Study it and find the value of the unknown letters.

**(4 marks)**

8	3	x
p	5	9
t	n	2

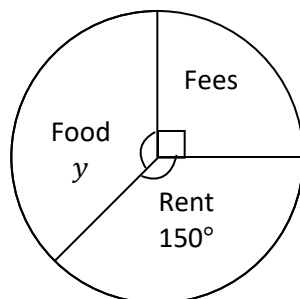
x = \_\_\_\_\_

p = \_\_\_\_\_

t = \_\_\_\_\_

n = \_\_\_\_\_

23. The pie chart represents Sarah's expenditure per month.



(a) Find  $y$ .

(2 marks)

(b) Given that Sarah spends sh. 36,000 more on rent than on food. How much does she earn per month?

(3 marks)

24. (a) Using a ruler, pencil and a pair of compasses only construct a triangle PQR where  $\overline{PQ}=7\text{cm}$ , angle  $P=120^\circ$  and angle  $PQR=30^\circ$ .

(4 marks)

(b) Measure angle PRQ.

(1 mark)

25. (a) Prime factorise 48 using set notation.

(2 marks)

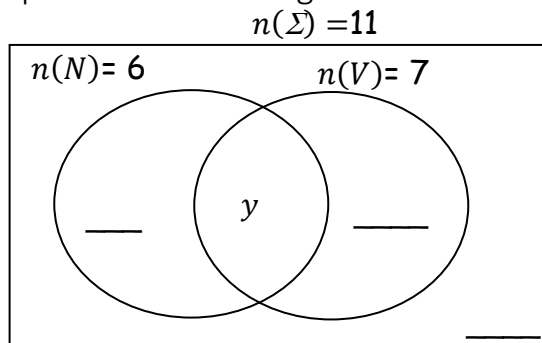
(b) Workout the sum of prime numbers between 80 and 90.

(2 marks)

26. In a family of 11 members, 7 play volleyball, 6 play netball, some members play both games while one person plays none of the two games.

(a) Complete the Venn diagram.

(3 marks)



(b) Find the value of  $y$ .

(2 marks)

(c) Workout the probability of picking a member of the family who plays only one game.

(2 marks)



27. A bus travelling at 80km/hr. took 2hrs 30minutes to cover part of the journey, the rest of the journey was covered in  $1\frac{1}{2}$ hrs. at a speed of 120km per hour.

(a) What distance did the bus cover altogether?

(3 marks)

(b) Workout the average speed for the whole journey.

(2 marks)

28. A girl is 20years younger than her sister. In 15 years' time, the sister will be twice as old as the girl. Workout the age of each person now.

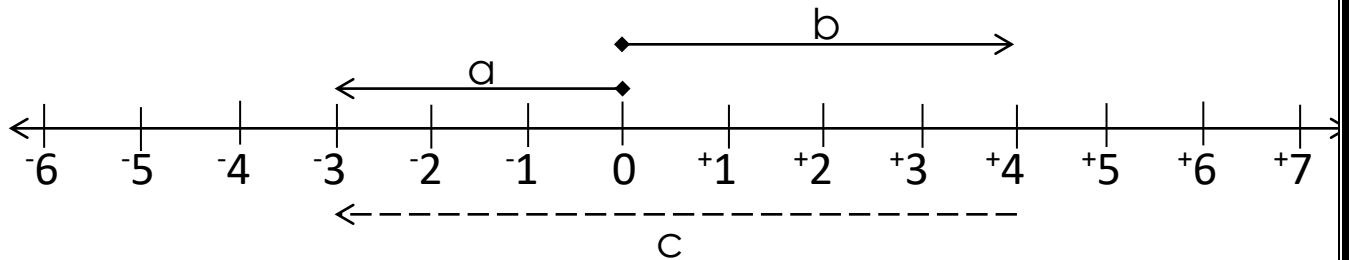
(5 marks)

29. (a) Find the principle that can yield sh. 7,200 in a bank that gives an interest rate of 20% per year in a period of 6 months.

(2 marks)

- (b) Calculate the amount of money that will be in that account by the end of the period of 6 months. (2 marks)

30. (a) Use the number line below to find the value of the letters. (1mark@)



a = \_\_\_\_\_

b = \_\_\_\_\_

c = \_\_\_\_\_

- (b) Write the mathematical sentence represented above. (1mark)

31. (a) Study and complete the table below: (1mark@)

Item	Unit cost	Amount
$1\frac{1}{2}$ kg of tea	Sh. _____	Sh. 900
2kg of posho	Sh. 3400	Sh. _____
_____ bars of soap	Sh. 1800	Sh. 5,850
750gms of salt	Sh. 2000 per kg.	Sh. _____
	Total	Sh. _____

(b) If Amina was given sh. 1,450 as balance after paying for all the items, what did she have at first? (2 marks)

32. Jumbo, Tendo and Mambo contributed sh. 24,000, sh. 36,000 and sh. 60,000 respectively for a joint business which made a profit of sh. 51,000 by the end of the business. They then agreed to separate and each of them starts his own and they shared the total money according to their initial contributions. How much did each person get? (5 marks)

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