

# SEETA JUNIOR SCHOOL

## PRINCIPAL'S PRE- PLE 2024

### MATHEMATICS

Time Allowed: 2Hrs: 15 Mins

Index No.

EMIS No.						Personal No.		

Candidates Name: .....

Candidates Signature: .....

#### Read the following Instructions carefully

1. Do not write your school or district name anywhere on this paper
2. The paper has two sections: A and B
3. SECTION A has **20** questions and Section B has **12** questions .
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. Any work written in pencil will not be marked.
6. Unnecessary changes in your work and handwriting that Cannot be read easily may lead to loss of marks.
7. Do not fill anything in the table indicated;  
"FOR EXAMINER'S USE ONLY" and boxes inside the Question Paper.

#### FOR EXAMINER'S USE ONLY

QN. NO	MARK	SIGN
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-32		
TOTAL		

## SECTION A: 40 MARKS

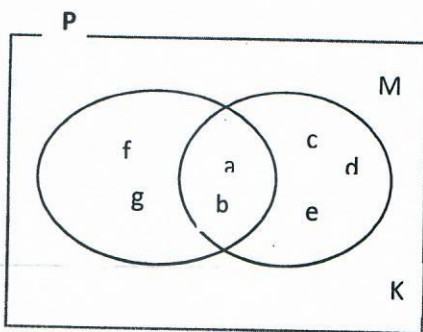
Answer all questions in this section. Question 1 to 20 carry **two** marks each

1. Workout  $31 \times 3$

2. Write "three hundred twenty-one thousandths" in figures.

3. Simplify:  $7x - 5P - 2x - 3P$ .

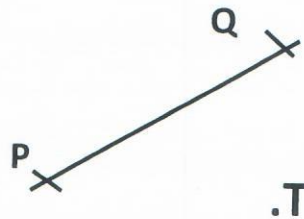
4. Use the venn diagram below to find  $n(M)'$ .



5. Find the next number in the sequence below;

$\frac{1}{24}, \frac{1}{12}, \frac{1}{6}, \dots$

6. Construct a perpendicular from point T to line segment PQ.



7. Its twenty three minutes to 3 O'clock in the afternoon. Express this time in the 24 hour clock system.

8. Paul has  $\frac{3}{4}$  loaf of bread. If he gives away  $\frac{1}{3}$  of it to Mary, what fraction of the bread will he remain with?

9. A customer paid sh. 33,500 after being given a discount of sh.1,500 for a phone. Find the marked price of the phone.

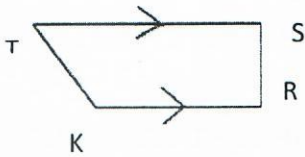
10.Solve:  $\frac{1}{2}P^2 + 3 = 35$ .

11.Given that  $y= -5$ ,  $X= -3$ . Find the value of  $X^2 - y$

12.An athlete run around twice a circular field of radius 100m. Calculate the distance he covered. Take  $\pi= 3.14$

13. Change  $123_{\text{five}}$  to denary base.

14. The area of the figure below is  $72\text{m}^2$ .  
The length of  $RS = 8\text{m}$  and  $KR = 6\text{m}$ . Find the length  $TS$ .



15. A house can be constructed by 6 men in 12 days. How many more men working at the same rate are needed to complete the same road in nine days?

16. In a Health Centre IV, the mass of newly born babies is recorded using the expressions  $(X + 3)$  kg,  $(2 + 2x)$  kg and  $(3x - 2)$  kg. Find the mean mass of the babies.

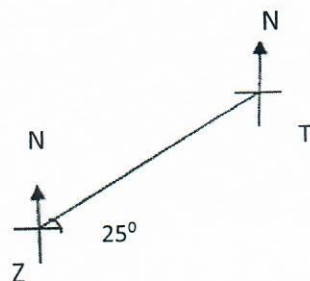


17. A business lady bought 5.75kg of simsim paste. She packed all the paste in small tins of 250 grams each. How many tins did she get from all the simsim paste?

18. Express 702.4 in standard form.

19. A woman's daily wage was decreased from sh. 32,000 to sh. 28,000. In what ratio was the wage decreased?

20. Study the diagram below and find the bearing of Z from T.



## SECTION B

21. Find the largest number of boys who shared 24, 36 and 48 books with no remainder.

a) If  $y+2$  and  $2y-1$  are two consecutive odd numbers, find the numbers.

22. Solve for  $M$ ;  $2m^2 - 4 = 68$ .

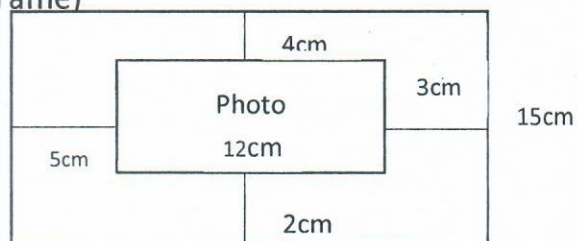
a) The perimeter of a rectangle is 48dm. Its length is three times its width. Find the width of the rectangle.

23. Simplify:  $\frac{1}{2} - \frac{3}{4} + \frac{5}{8}$

a) Work out:  $3.6 \times 4.8$

$0.5 + 0.4$

24. Study the figure below and answer questions that follow. (Photo enclosed in a frame)

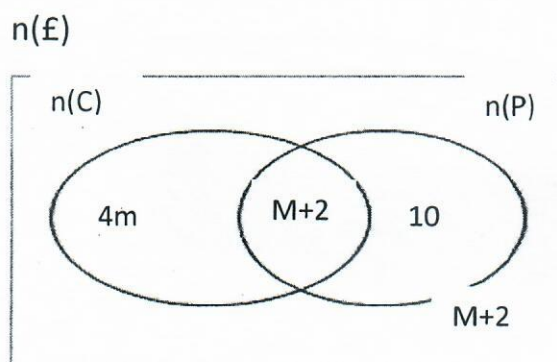


a) Find the width of the photo.

b) What is the length of the frame?

c) Calculate the area which is not occupied by the photo.

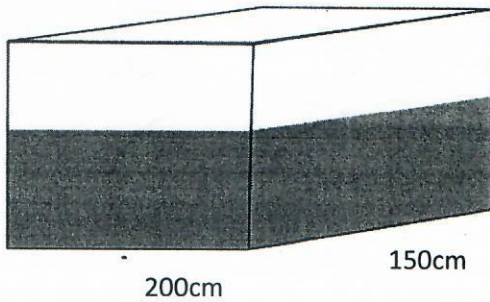
25. During a P7 party, Coca-Cola (C) and Pepsi (P) were served as shown in the Venn diagram below.



a) If the pupils who took Coca- cola only were the same number as those who did not take Coca-cola. Find the value of **M**.

b) Find the probability of choosing at random a pupil who drunk Pepsi only.

26. The rectangular tank below contains 2,100 litres of fuel.



a) Find the height of the fuel in the tank.

b) Given that the tank is  $\frac{3}{5}$  full of fuel, how many litres are needed to fill up the tank?

27. The sum of the interior angle of a regular polygon totals to 12 right angles. Find the size of each exterior angle of the polygon.

28. A motorcyclist traveled a distance of 5.28km. If the tyre made 30 complete revolutions to cover the distance. Find the radius of the tyre in metres. ( $\pi = \frac{22}{7}$ )



29. Using a pair of compasses, ruler and pencil, construct a triangle XYZ in which  $XZ = 6\text{cm}$ ,  $\angle YZX = 30^\circ$ ,  $\angle ZXY = 120^\circ$ .

30. The time table below shows a journey of 240km by a taxi driver from Nakaloke Town to mukono town.

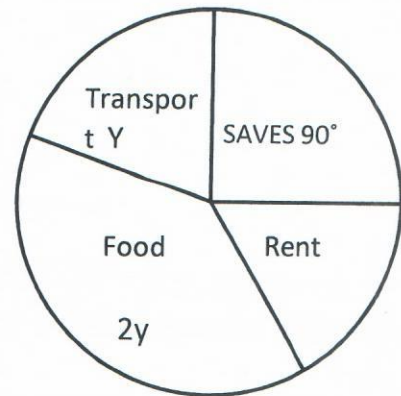
Town	Arrival Time	Departure time
Nakaloke		7:30 am
Mbale	8:00 am	8:15 am
Busembatya	9:00 am	9:10 am
Iganga	10:15 am	10:30 am
Jinja	11:00 am	11:15 am
Mukono	12:15 pm	

a) How many hours did the taxi driver take to travel from Mbale up to Jinja?

b) How many stop-overs did the taxi- driver make?

c) Work out the average speed of the taxi driver for the whole journey.

31. The pie chart below shows how Bruno spends his monthly income. Use it to answer questions that follow.



a) Find the value of Y in degrees.

b) If Bruno spends sh. 10,000 more on transport than on rent, find his monthly income.

a) If lady Lillian was given a 10% discount, find the total amount of money she paid for all the items.

32. Lady Lillian went shopping and bought the following items;

Item	Quantity	Unit cost	Total
Rice	3kg	Sh.4000	Sh. 12,000
Beans	2½ kg	.....	Sh. 10,500
Maize flour	..... kg	Sh. 3600	Sh. 5400
			Sh. ....

END