SERERE PRIMARY SCHOOLS JOINT MOCK ASSESSMENT 2024 PRIMARY SEVEN

MATHEMATICS

Time Allowed : *2 Hours 30 Minutes*

Index No.	Random No.						Personal No.		

Name:..

School:...

Signature:..

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO D SO

1. The 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 section 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.
6. Unnecessary alterration of work may lead to loss of marks
7. Any handwriting that cannot easily be read may lead to loss of marks
8. Do not fill anything in the boxes indicated for examiners' use only

FOR EXAMINERS' USE ONLY

QN. NO	MARKS	EXR'S
NO		
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21- 22		
23- 24		
25- 28		
29- 30		
31- 32		
TOTAL		

Turn Over

SECTION A (20 QUESTIONS - 40 MARKS)

1. Workout 42 x 7

2. Solve 3 - 2k = 9

3. Round off 43.678 to the nearest hundredths
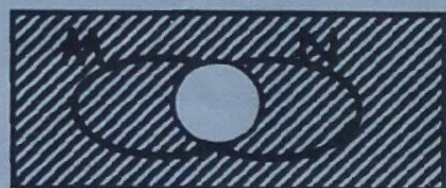
4. Change 9:30pm into a 24 hour clock system

5. Using a ruler, a pencil and a pair of compasses only, construct angle of 120°

6. Find the next number in the sequence below

1, 3, 6, 11, 18, _____

7. Express 94 in Roman numerals

8. Describe the shaded part in the venn diagram below.

9. After covering 60km of the journey, Jacob still had $\frac{7}{12}$ to go. How long was the journey?

10. The average of 13, 17, 16 and k is 15, find the value of k

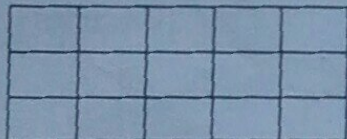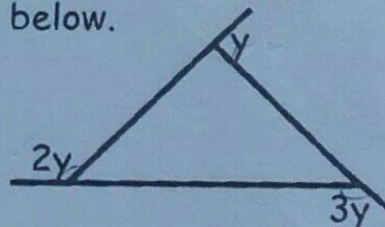|	
11. In the space below, draw a number line to show $^-3 - ^-7$	12. Samuel bought a pair of shoes and later sold it at sh. 42,500 making a profit of sh. 4,500. Find the amount of money Samuel spent for buying shoes
13. Prime factorise 12 and write the prime factors in set notation form	14. Given that $M = ^-4$, $n = ^-2$ and $q = ^-3$, find the value of $\dfrac{mq}{n}$
15. Increase 144 in the ratio of 7:6	16. Workout: $2m - 1 = 4$ (finite 5)
17. In the diagram below, shade 40 %	18. Find the value of y in the figure below.

19. A bicycle wheel of radius 14cm covers a distance of 44m. find the number of revolutions made by the wheel to cover the distance (use $\pi = \frac{22}{7}$)

20. A boy tossed a dice once, find the probability that number which appears on top is a composite number.

SECTION B (60 MARKS)

21. Kim went for shopping and bought the following items;
2250 grams of rice at sh. 4000 a kg
3 kgs of soya beans at sh. 6000.
15 egg plants at sh. 500 for every 3 egg plants
   a) Workout his total expenditure   (3marks)

   b) If Kim went back home with sh. 2500, How much money did he have at first?
                                                                             (2marks)
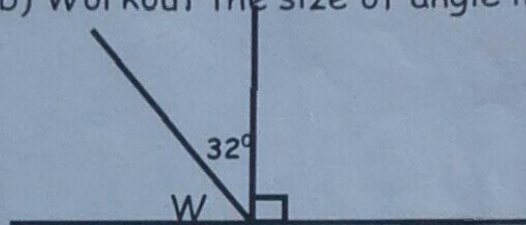
22. A group of candidates scored the following marks.

Mark	45	k	80	90	70
No. of candidates	3	5	2	1	1

a) Find the value of, if the average score is 75. (3marks)
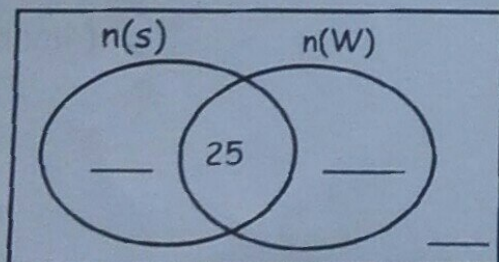
b) Workout the range score. (2marks)

23. a) The complement of angle 2p is 70^0 find the value of P (2marks)

b) Workout the size of angle marked W (2marks)

32°

W

24. During the inter house athletics competitions held at Serere SS recently, 120 guests drank soda (S) only, (q + 30) drank water (W) only, 25 drank both soda and water and 15 guests drank none of the drinks.

a) Complete the venn diagram below using the above information. (3marks)

n(s)   n(W)

25

b)If 95 guests drank water, find the value of q (2marks)

$\square$

25. A square garden of area 225m² needs to be fenced using concrete poles planted 3 metres apart. How many such poles does the farmer need? (6marks)

26. a) Simplify: $\dfrac{0.03+0.6}{0.2 \times 0.09}$ (3marks)

b) Change $33\frac{1}{3}\%$ as a fraction. (2marks)

27. A shirt and a neck tie cost sh. 30,000, if a shirt costs five times the cost of a neck tie. Find the cost of each item. (4marks)

28. a) Write the place value of 0 in 1101$_{two}$ (2marks)

(b) Find the value of k: $33_k = 120_{four}$ (3marks)

29. Town A is 80km North of Town B and town C is 60km East of town B, using a scale of 1cm to represent 10km, show the location of three towns. (3marks)

b) Find the shortest ground distance between town A and town C. (2marks)

30. a) A motorist travelled at a speed of 40 km/h from 8:30am to 10:00am. He rested for $\frac{1}{2}$h and later continued with the journey at a speed of 80km/h for 2 hours.

a) How long did the motorist take before resting? (2marks)

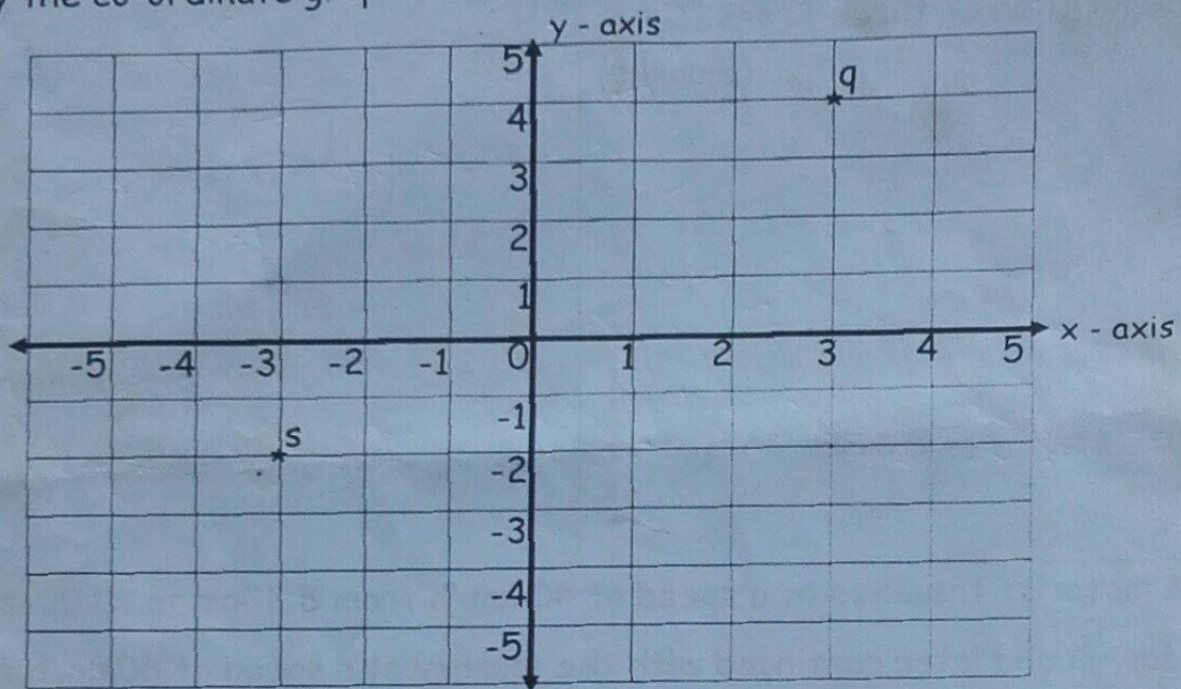b) Calculate the average speed for the whole journey (3marks)

31. Square tiles of sides 30cm were laid on a rectangular floor of a room measuring 9m by 6m.
a) How many tiles were used altogether? (2marks)

b) If a box containing 12 tiles costs sh 36000, find the total cost of all the tiles that were used. (2marks)

32. Study the co-ordinate graph below and use it to answer questions that follow.

a) Write the co-ordinates represented by. (1 mark each)

(i) q _____

(ii) s _____

b) Plot point R(3, -2) and P (-3, 4) on the graph above (1 mark each)

c) Join the plotted co-ordinates and name the figure formed. (2marks)

END