SEETA JUNIOR SCHOOLS EXAMINATIONS COMMITTEE

QUALITY CHECK SET 3 EXAMINATION

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

EMIS No.						Personal No.		

Index No. :

Candidate's Name : .....

Candidate's Signature : .....

EMIS No. : .....

District Name : .....

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-pointpen 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' NO.
1 – 5		
6 – 10		
11 – 15		
16 – 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		

SECTION A: (40 MARKS)

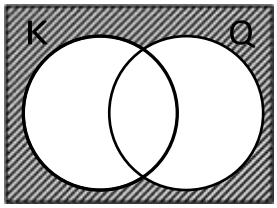
(Questions 1 to 20 carry two marks each.)

1. Work out: $0.2 + 0.3$

2. Simplify: $2pp^2 - 4rr + pp^2 - 2rr$

3. Describe the shaded region on

the venn diagram.



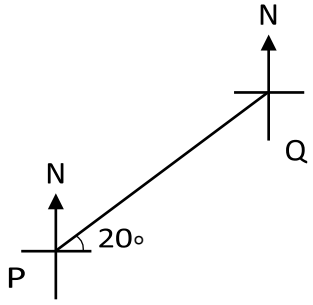
4. A dozen books was bought by a businessman at sh. 6000 and he sold each book at sh. 650. Calculate the profit he got after selling all the books.

5. Solve for x: $x - 4 = 3 \ (\ mmm\, 5)$

6. A forty-five-minute lesson started at 12:30pm. At what time did it end in a 24hour clock system?

7. Study the diagram given.

Find the bearing of P from Q.



8. A motorist covered a distance of 80km in 40minutes. Find the speed in Kilometres per hour.

9. Find the next number in the sequence below.

5, 13, 25, 41, 61, _____, _____

10. A spinner is made from a regular pentagon and labelled 1 – 5. What is the probability of a score of a prime number appearing?

11. Write CXIX in words.

12. Simplify: $(9kk - 4yy) - (3kk + yy)$

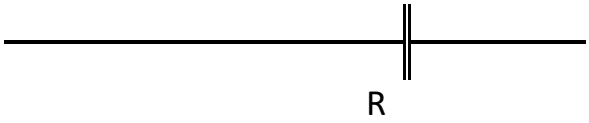
13. In the diagram below, shade 75% of the total number of the squares.

14. Given that a = 5 and b = 3, find the value of 2(a—b).

15. Find the number of revolutions a wheel of radius 35cm can make to cover a distance of 2.2km?

$$\left(\pi\pi = \frac{2222}{77}\right)$$

16. Using a pair of compasses, ruler and pencil, construct an angle of 150° at point R.



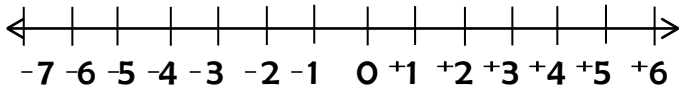
17. Boy scouts are standing on a straight line, Paul is the 7^{th} and 12^{th} from either side of the line. How many boy scouts are on the line?

18. Work out:

$1001_{three} - 21_{three}$

19. The school bursar gave out receipts for a concert from serial number 3041 to serial number 3090. If each receipt was for sh. 15,000, how much money did the bursar collect?

20. Workout: $^{+}5 - {}^{-}2$ using the numberline below.



SECTION B: **(60 MARKS)**

Answer **all** questions in this section.

21. (a) Solve for tt: **(3marks)**

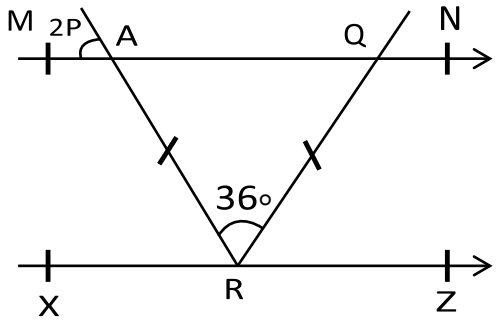
$2tt^2 - 4 = 124$

(b) The perimeter of a rectangle is 56cm. Its length is three times its width. Find the width of the rectangle. **(2marks)**

22. (a) Workout: $\frac{0.3 + 0.03}{0.03}$ **(3marks)**

(b) Six builders take 4 days to roof a house. How many more builders are needed to roof the house in 3 days? **(2marks)**

23. Study the diagram and use the information to answer the questions that follow.

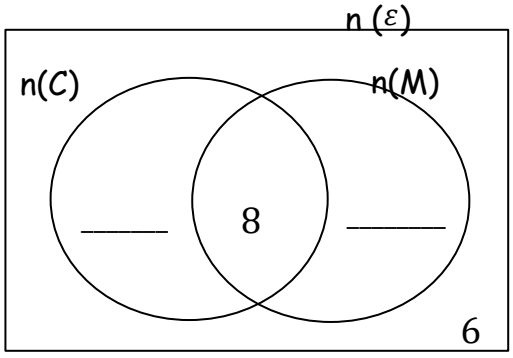


(a) Find the value of **P**. **(2marks)**

(b) Workout the size of the angle marked **QRZ**. **(2marks)**

24. At a party, (P - 10) guests ate chicken (C) and 25 ate meat (M), 8 ate both meat and chicken while 6 did not eat any of the dishes.

(a) Complete the venn diagram. **(2marks)**



(b) Given that 22 guests ate only one type of sauce, find the value of P.

(2marks)

(c) How many guests attended the party? **(2marks)**

25. A bus left Kampala at 7:15a.m travelling at a speed of 80km/hr. At 10:45a.m, it got a puncture that took $\frac{1}{2}$ hour to fix before it continued to Mbarara at a speed of 55km/h for 2hours.

(a) At what time did the bus arrive Mbarara? **(3marks)**

(b) Calculate its average speed for the whole journey. **(4marks)**

26. The table below, shows the rate at which different currencies are bought and sold in a commercial bank.

Currency	**Buying price**	**Selling price**
1US dollar	Ugx. 3800	Ugx. 3850
1Kenya shilling	Ugx. 37	Ugx. 38

(a) Mukasa has Ugx. 308,000, how many US dollars will he get from the bank? **(2marks)**

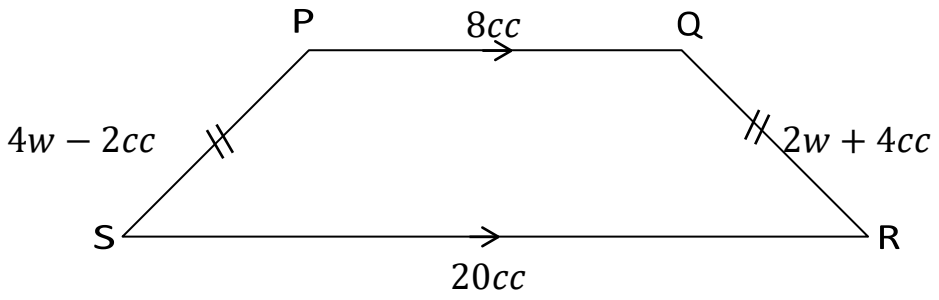
(b) The cost of a radio is 170 US dollars, find the cost the radio in Kenya shillings. **(2marks)**

27. The average of $2mm + 5$, $4 + mm$, $3mm + 1$ and 12 is 19.

(a) Find the value of mm. **(3marks)**

(b) Workout the largest number. **(2marks)**

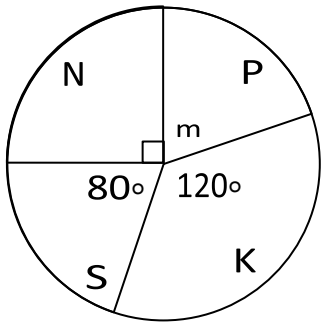
28. The figure below is an Isosceles trapezium in which **PQ = 8cm** and **RS = 20cm**.



(a) Find the value of $\boldsymbol{ww}$. **(2marks)**

(b) Calculate the area of the figure **PQRS**. **(4marks)**

29. The pie-chart shows the number of pupils in different streams at Apollo Junior School. Study it carefully and answer the questions that follow.



(a) Find the value of **m**. **(2marks)**

(b) If there are 19 more candidates in stream K than stream N. Find the total number of pupils in the class. **(3marks)**

30. Given the numeral 30.68.

(a) Round off the numeral to the nearest whole number. **(2marks)**

(b) Find the product of the value of 3 and place value of 6 in the given number. **(2marks)**

31. At a shop, the cost of a fountain pen is sh. 3000 less than that of an oxford set. A box file costs $\frac{2}{3}$ as much as oxford set. If all the items cost sh. 49,200. Find the cost of the fountain pen. **(5marks)**

32. (a) Construct a rhombus **WXYZ**, such that **ZWX = 120**$^{\circ}$ and line **WZ = 6cm**.

(3marks)

(b) Measure diagonal **ZX**. **(1mark)**

*****THE END*****