KIRUHURA DISTRICT PRIMARY SCHOOLS

HEADTEACHERS' ASSOCIATION

MOCK EXAMINATIONS, 2023

MATHEMATICS

TIME ALLOWED: 2H RS 30 MINUTES

INDEX NO.

CANDIDATE'S NAME_____

CANDIDATE'S SIGNATURE_____

SCHOOL NAME _____

SUB-COUNTY: _____

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. Section **A** has 20 questions (40 marks)

3. Section **B** has 12 questions (60 marks)

4. Answer **ALL** questions in Section **A** and **B**. Answers must be written in The spaces provided.

5. All answers must be written using a blue Or black ball-point pen or ink. Only diagrams may be done in pencils.

6. Unnecessary alternation of work may lead to loss of marks

7. Any handwriting that cannot easily be Read may lead to loss of marks.

8. The use of electronic calculators and Mathematical tables is not allowed

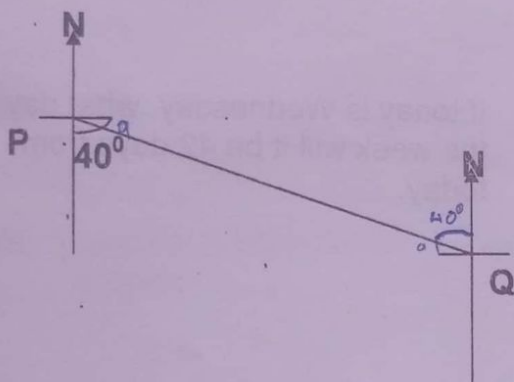| FOR EXAMINERS' USE ONLY		
QN. NO.	MARKS	INITIALS
1 - 10		
11 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

1. Workout: 5 tens + 7 ones

2. Simplify: ‾6 + ‾4

3. Solve: $2y^2 = 72$

4. Given that set M = {all square numbers between 1 and 25}.
   Set N = {all factors of 12}
   Find n (N – M)

5. Express 0.0043 in scientific notation.

6. Write 909,099 in words

7. A meeting which ended at 9:30 a.m lasted for $2\frac{1}{3}$ hours. At what time did it start?

8. Use the diagram below to find the bearing of town P from town Q.

9. Round off 34761 to the nearest thousands.

10. Write the sum of the next two numbers in the sequence
14, 11, 16, 13, 18, _____, _____

11. Using a pair of compasses and a ruler only, bisect the line segment PQ.

12. If 🍎 represents 15 apple and costs Sh. 5000 each, how much does one get from
🍎 🍎 🍎

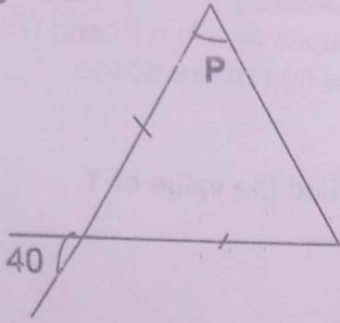13. A car travelled at an average speed of 90km/hr to cover a distance in 40 minutes. Calculate the distance covered by the car.

15. Doris banked Sh. 600,000 in DFCU Bank. If the interest rate was 20% per annum, how much interest did she earn after 6 months?

14. Calculate the length of the arch AB in the semi circle below. Take $\pi = \frac{22}{7}$

35cm

16. If today is Wednesday, what day of the week will it be 42 days from today.

17. In the diagram below, find the value of angle marked P in degrees.
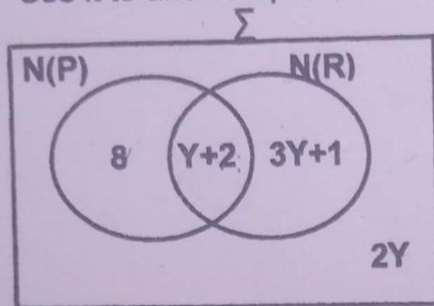

19. Change 45_{ten} to base three.

18. Convert 3:45pm in 24 hour clock system.

20. After covering $\frac{1}{3}$ of my journey, I still have 40km to cover. How long is the whole journey?

5

21. The venn diagram below shows a class of pupils who like Posho (P) and Rice (R) some of them like both meals while 31 pupils do not like posho.
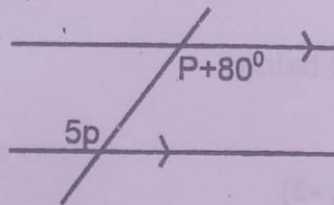Use it to answer questions that follow

Σ

N(P)   N(R)

8 (Y+2) 3Y+1

2Y

(a) Find the value of Y.

(b) Find the probability of selecting at random a pupil who likes posho.

22. Simplify: $\dfrac{4}{5} \times \dfrac{2}{3} \div \dfrac{8}{9}$

(b) **Workout:** $\dfrac{0.45 \times 0.15}{0.9 \times 0.03}$
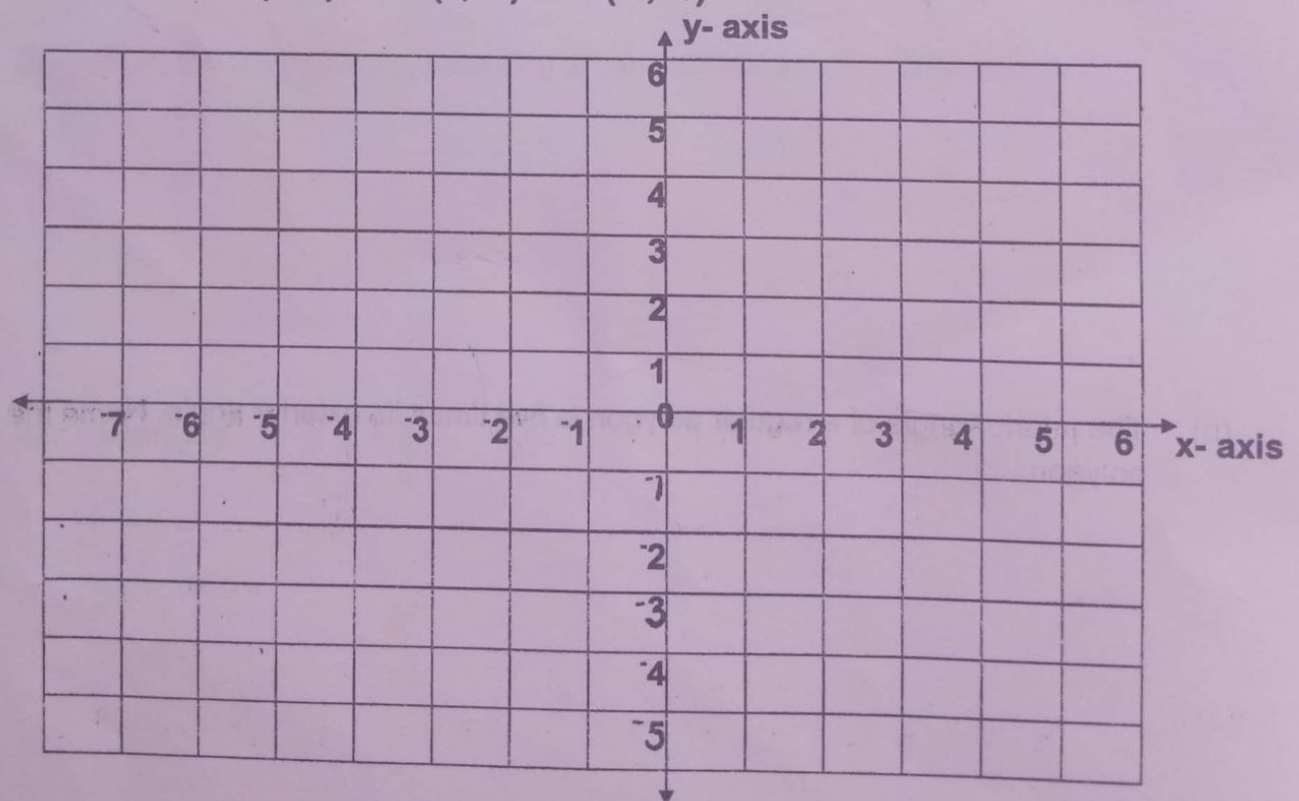
23(a) Find the size of the angle marked **P**.

(b) The interior angle of a regular polygon is five times its exterior angle. Name the polygon.

24. In Kashongi Junior School, ¼ of the pupils in P.7 like science, $\frac{2}{3}$ of the remainder like Mathematics. If those who like English are 33, find the total number of pupils in P.7.
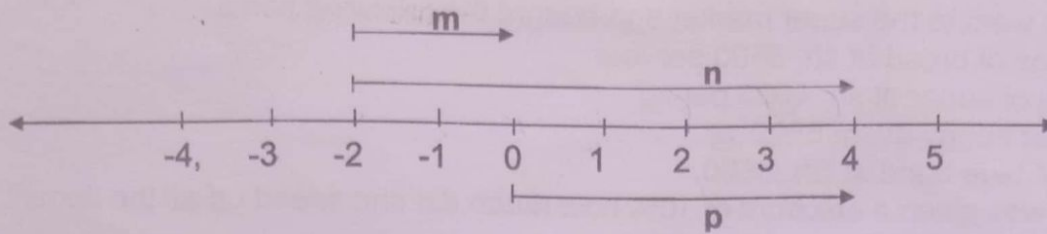
25(a) Plot the following coordinates on the grid below.

A (-2, 2)   B (1, 2)   C (4, -3)   D (-2, -3)

b) Join **A** to **B**, **B** to **C**, **C** to **D**, **D** to **A** and name the figure formed.

26. Study the numberline below and answer questions about it.

(a) Write the integers represented n

(i)   n

(ii) m

(iii) p

(b) Write the mathematical sentence shown on the numberline above.

Mock 2023   MTC

27. Melisa went to the super market and bought the following items.
2 loaves of bread at sh. 5500 per loaf
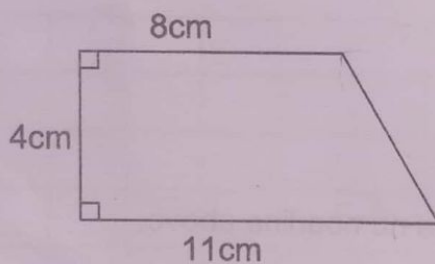2 ½ kg of sugar at sh. 4000 per kg
3 tins of honey at sh. 6500 @
A tin of blue band at Sh. 3500.
If she was given a discount of 10% how much did she spend on all the items?

28. **Study the figure below and answer questions about it.**

8cm

4cm

11cm

(a) Calculate the area of this figure.

(b) Workout its perimeter.

29. The sum of three consecutive even numbers is 36. If the first number is K + 1,
(a) Find the numbers

(b) Workout the range of the numbers.

30. Using a pair of compasses, a pencil and a ruler only, construct a triangle KLM where KL = 6cm, angle KLM = 120^0 and line LM = 7cm. drop a perpendicular bisector from M to meet KL at X.

31. Mike is 16 years older than his sister Joan. 5 years ago, the ratio of their ages was 5:3 respectively. How old is mike now?

32. A bus travelled from Kampala to Fortportal a distance of 280km from 2:30pm to 6:00 pm
(a) Calculate the average speed of the bus.

(b) Express 30 m/s to km/hr.