HILLSIDE PRIMARY SCHOOL-NAALYA
P.7 PRE-REGISTRATION SET FIVE
2023
MATHEMATICS
Time Allowed: 2 Hours 30 Minutes

Index No.

Candidate's Name..

Candidate's Signature..

School Name..

District Name...

Read the following instructions carefully:

1. The paper has **two** sections: A and B. Section A has 20 questions and section B has 12 questions. The paper has 16 pages altogether.

2. All 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 ink or fountain pen. Any work done in pencil other than graphs 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 boxes indicated: "**For Examiners' Use Only** "and those inside the paper.

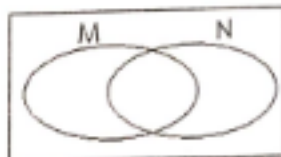| Qn. No.	MARKS	EXRS' NO
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

FOR EXAMINERS' USE ONLY

SECTION A: *40 MARKS*

1. Work out : $^+3 + ^+5$

2. Simplify: 4p - 6k + 8k

3. Write 2023 in words

4. Find the difference between the next two numbers in the series
   9,11,14,19,26,_____,_____

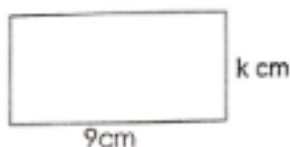5. Shade either set M or set N in the Venn diagram below;

6. In a stationers, 9 counter books cost sh.63000. Find the cost of 5 similar books at the same rate.

7. A parents' meeting started at 9:15am and lasted $1\frac{1}{4}$ hours. At what time did it end?

8. Using a ruler and a pair of compasses, construct an angle of 30^0 in the space provided below.

9. The perimeter of the figure below is 32cm. Find the value of k.

k cm

9cm

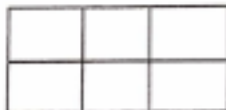10. Work out $(56 \div 7) + (14 \div 7)$ using distributive property.

11. Given that **2p** and (**p+30°**) are supplementary angles, find the value of p.

12. Given that represents 6 pencils, draw pictures to represent 36 pencils.

13. Given that a=8 and b=2, evaluate a^b

14. The ratio of girls to boys in a class is 3:2. Find the number of girls if there are 18 boys in that class.
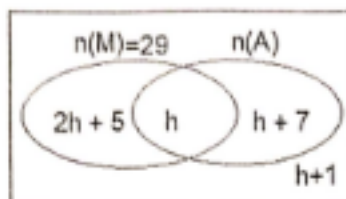
15. Shade $\frac{2}{3}$ of the diagram below

3

16. A building that was constructed in the year 18BC collapsed in the year 25AD. How old was the building by the time it collapsed?

17. Madueke rolled a dice once. What is the probability that a prime number showed on top?

18. Given that $3^p \div 9 = \dfrac{1}{81}$

19. Work out 3-5 using a dial in finite G

20. A businessman bought an article at sh. 35,000 and later sold it at a loss of 20%. At what price did he sell the article?

4

SECTION B: 60 MARKS

21. The Venn diagram below shows the number of people who support Manchester United and Arsenal in a certain village. Use it to answer the questions that follow.

a) Find the value of h

b) How many fans ~~do not~~ support Manchester United?

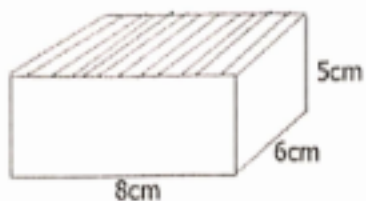c) Find the number of fans who support Arsenal but not Manchester United.

22. The ratio of cows to goats to sheep on Jjemba's farm is 5:3:2 respectively. If he has 30 more cows than sheep on the farm,

a) How many animals are on Jjemba's farm?

b) Express the number goats as a fraction of the total number of animals on the farm.

23. a) Change 49_{ten} to base five

c) Given that $104_p = 40_{ten}$, find the value of p.

6

24. Study the figure below and use it to answer the questions that follow;

5cm

6cm

8cm

a) Find the area of the shaded part.

b) Work out the capacity, in litres of the figure

25. Below is a list of items bought by Okeno in a supermarket as he was reporting to school;
2 tins of powdered milk at sh.13500 @ tin
3 bars of soap at sh.6500 each bar
5 rolls of toilet paper at sh.5000
2 brooms at sh.1250 per broom
a) What was his total expenditure?

b) If Okeno was given a discount of sh.1000, calculate his balance if he initially had sh. 60,000.

26. a) Simplify: $\frac{2}{3} \times \frac{1}{2} \div \frac{3}{4}$

c) Work out: $\frac{0.24+0.06}{0.6-0.3}$

27. When marking a 25 question test, the teacher awarded 4 marks for every correct answer given and deducted 2 marks for every wrong answer given.
a) How many marks did Mudibo, who failed 5 questions, get?

b) If Bolingo scored 58 marks in that test, how many questions did he fail?

28. Using a ruler, a pair of compasses and a pencil, construct a triangle PQR in the space below, where PQ =8cm, angle QPR=45° and PR =6cm.

Measure line QR

29. Use the number 19.64 to answer the questions that follow;
   a) Find the value of 6 in the above number.

   b) Round it off to the nearest whole number.

   c) Write the above number in expanded form using exponents

30. In a village council meeting, there were twice the number of men than women and the children were half the number of women. If the total attendance was at 42 people,
   a) How many women attended the meeting?

   b) How many less children than men were in that meeting?

31. The table below shows the marks scored by some pupils in one of the tests. Use it to answer the questions that follow.
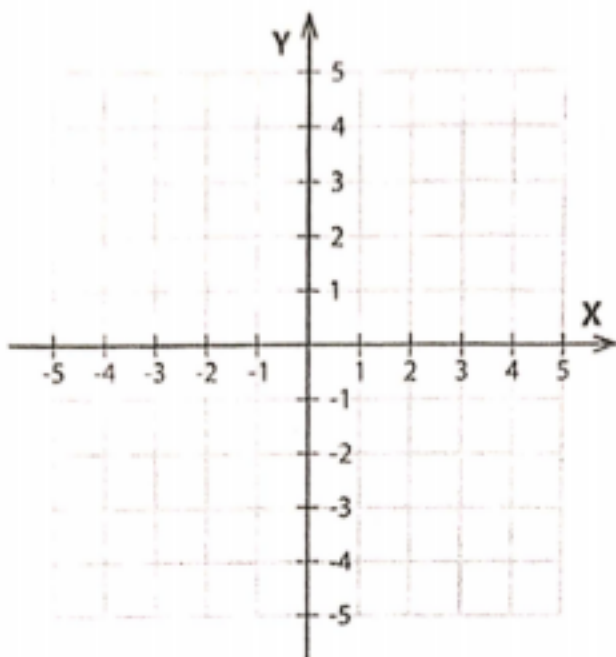
Marks scored	80	k	90	60
Number of pupils	4	6	2	8

a) How many pupils did the test?

b) If the average score was 70, find the value of k

32. Study the graph below and plot the following coordinates;

a) Plot the coordinates A(-3,2), B(4,2), C(4,-2) and D(-3,-2).

b) Join point A to B, B to C, C to D and then D to A

c) Name the polygon formed after joining points above.