

KAMPALA PARENTS' SCHOOL 2004
PRE-MOCK EXAMINATION, 2022
MATHEMATICS
TIME: 2 HOURS 30 MINUTES

NAME: _____

INDEX NO: _____ **STREAM:** _____

INSTRUCTIONS

Read the following instructions carefully.

1. This paper has two Sections A and B.
Section A has 20 questions and Section B has 12 questions.
2. All the working for both Section A and B must be shown in the spaces provided.
3. All working must be done using a blue or black ball point pen or ink. 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 the boxes indicated.

FOR EXAMINERS USE ONLY		
Qn. No.	MARKS	EXR'S NO.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

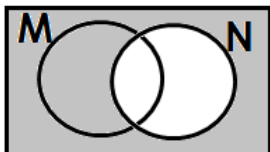
SECTION A

1. Add: $32 + 24$

2. Mary had 20 litres of liquid soap. She gave each child $\frac{1}{2}$ litres. How many children did she give?

3. Simplify: $m - 8m + 8m$

4. Study the diagram below and describe the shaded part.

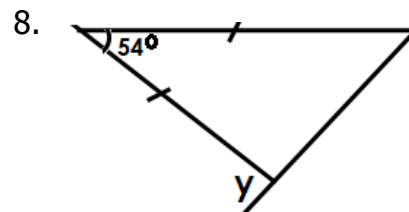


5. Fill in the last two numbers

0, 1, 5, 14, 30, _____, _____

6. Subtract: 203_{five}
 $- 14_{\text{five}}$

7. The points below were scored by different teams in a tournament. 6, 2, 3, 8, 9, 3, 4, 9 find the median score.



Calculate the value of y in degrees.

9. Peter got $2\frac{1}{2}\%$ in a maths contest. What fraction of the work did Peter get?

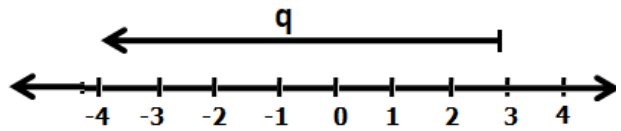
10. The circumference of a church's circular compound is 44m. Find its radius.

11. Study the figure below and answer the questions that follow.



Tell the afternoon time shown on the clock face.

12. Name the integer shown by the arrow diagram on the number line.



13. Prime factorise 36 and write all the prime factors in set notation.

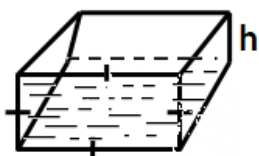
14. A pack of 53 playing cards has 4 kings, 4 queens, 4 jacks and 4 aces and others. What is the chance of picking a queen at random?

15. Write 414 in Roman Numerals.

16. A quarter a dozen of pens cost sh.4500.
Find the cost of 4 similar pens.

17. Using a ruler, a pair of compasses and a pencil only, construct an angle of 75° .

18. The volume of a cuboid below is 72cm^3 .
Find the height if the base is 24cm^2

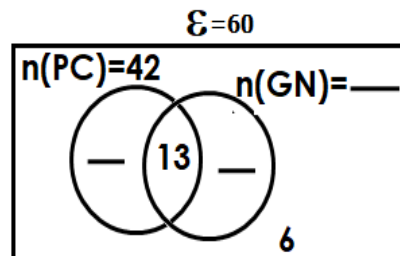


19. The school fees in school A in Gulu city is Three times that one of B. Find the amount of money paid by a child who goes to school B, if the difference in the structure is sh. 600,000.

20. Convert 72km / hr to m/s

SECTION B

21. In a birthday party of a class prefect in P.7B, 60 students were invited. 42 were served with popcorns (PC), 17 were served with G.nuts (GN), 6 did not take any and 13 were served with both eats. (3mks)
a) Represent the above information in the Venn diagram below.



b) How many students like G.nuts?
(2mks)

c) Find the number of students who were served with one type of eats. (1mk)

22. a) Given that $x = \sqrt{3}$ and $y=4$. Find the value of $\frac{3x + 2y}{2x - y}$ (3mks)

b) Solve for n: $3n - 5 = 7$ (2mks)

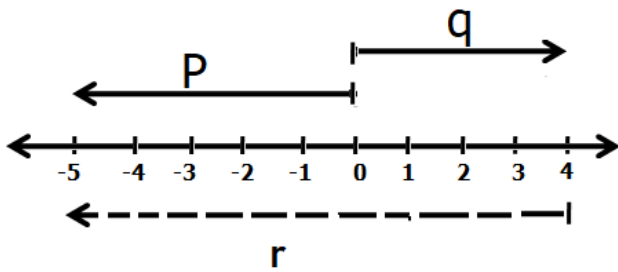
23. a) Workout: $\frac{0.021 \times 7.2}{0.9 \times 0.035}$ (3mks)

b) Express 0.3636.. as a fraction to its lowest term. (3mks)

24. Given the equation of the line as $x = 2y + 1$. Complete the table below. (5mks)

X	1	___	5	___	9
Y	___	1	___	3	___

25. Use the number line below to answer the questions that follow.



arrows. (1mk)

q =

p =

r =

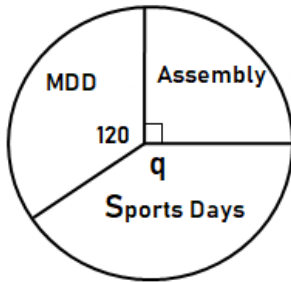
b) Write the mathematical sentence represented above. (2mks)

26. The interior angle of a regular polygon is five times the exterior angle.

a) Find the exterior angle, the sides and name the polygon. (4mks)

b) Calculate the interior angle sum of the regular polygon. (2mks)

27. The pie chart shows how a Headteacher of a school spends his monthly collections.



- a) Find the angle sector for sports day.
(2mks)
- b) How much does he spend on MDD if the total collection is shs. 480,000/=
- c) Express the money planned for assembly as a percentage of the total collection.

28. Teo planted $\frac{1}{2}$ of the land on a Thursday. $\frac{1}{4}$ of the remainder on Friday. If she completed 24m^2 on Saturday, how big was the whole land in sq.meters.

(5mks)

29. Toto went shopping with 3 notes of sh.20000 each and bought the following items.
- 3kg of sugar at sh.4000 per kg
 - 4kg of rice at sh.14,000
 - 4 tablets of soap at 5000/= per tablet.
- a) Find Toto's total expenditure. (4mks)

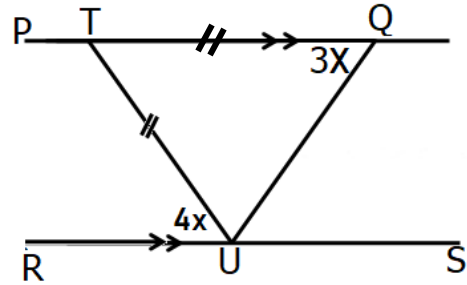
- b) If she used sh.2000 for transport, how much money was she left with. (1mk)

30. Using a ruler, a pair of compasses and a pencil only construct an equilateral triangle ABC of side 4.5cm. (4mks)

b) Measure angle ACB. (1mk)

31. The GCF and the LCM of two numbers are 6 and 72 respectively if the first number is 24. Find the 2nd number. (3mks)

32. In the diagram below, line \overline{PQ} and line \overline{RS} are parallel to each other $\overline{TU} = \overline{TQ}$



a) Find the value x in degrees.

b) Calculate angle QTU.

-THE END-