



ST. GABRIEL SCHOOLS BUSAABALA

ACADEMIC BOARD EXAMINATIONS

PRIMARY SEVEN PRE- REGISTRATION EXAMINATION (SET 2)

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.					EMIS No.		Personal No.	

Candidate's Name:

Candidate's Signature:

School Name:

District Name:

Read the following instructions carefully:

1. Do not **forget** to write your **school** and **district name** on this paper.
2. This paper has two sections: **A** and **B**.
Section **A** has **20** questions and Section **B** has **12** questions.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **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.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.
7. Do not fill anything in the table indicated:
"For Examiners' Use only" and boxes inside the question paper.

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. Using a ruler, a pencil and a pair of compasses only, construct the supplementary angle of 135°

2. Given that $n = 3$, $m = -2$ and $y = 8$. Find the value of $\frac{mn}{y+m}$.

3. Find the number of elements in a set with 32 subsets.

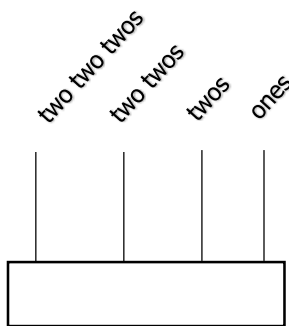
4. Work out: $18.4 - 9.16 + 7.23$

5. Show the lines of folding symmetry in the figure below.



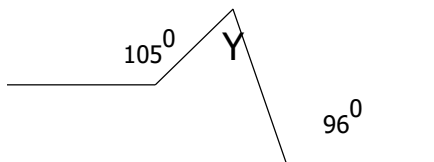
6. What was Mr. Kojoki's electricity meter reading at the beginning of the month if he used 99 units in the month of February and his current meter reading is 0064126?

7. Show 11_{ten} on the abacus below.



8. Plot -5, 2, 0, -3, 4, -4, 1 on a number line.

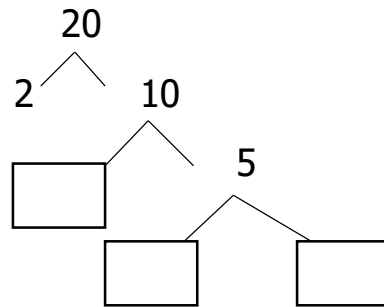
9. Find the size of angle marked y .



10. Given that set $Q = \{\text{Prime numbers between 40 and 50}\}$. Find $n(Q)$

11. A bag has 6 red pens, 10 blue pens and 4 black pens. What is the probability of picking a black pen without looking into the bag?

12. Complete the factor tree below and write your answer in subscript form.



13. Round off the year Uganda got her independence to the nearest hundreds. Write your answer in Roman numerals.

14. Solve for n:

$$2:3 = n:6$$

15. Find the reciprocal of $5\frac{4}{10}$

16. Electric poles are 20m apart. What is the distance from the first to the 16th pole?

17. What is the complement of $(X + 40)^\circ$

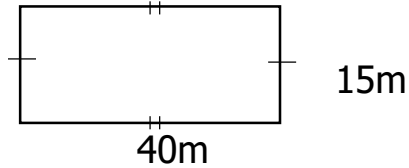
18. Work out $m^a \div m^y$

19. Draw a venn diagram to show that all pupils (P) and teacher (T) are found in school (S).

20. A piece of rectangular paper 35cm by 21cm was designed with circular paintings each of radius $3\frac{1}{2}$ cm. How many circles were in the design?

SECTION B. (60 marks)

21. Jerome wants to fence around his compound below using colored poles planted at intervals of 11 meters apart.

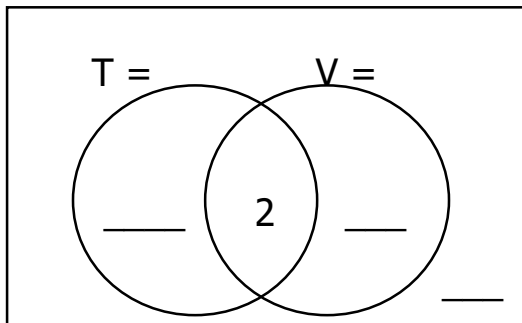


a). How many poles does he need?(3 marks)

b). Given that one pole costs shs. 2700, how much money is needed to buy the poles? (2 marks)

22. During a sports day, 18 girls played volley ball (V), 2 girls played both volley ball and Tennis, (t-3) pupils played Tennis only and 2t pupils played other games.

a). Use the information given to complete the venn diagram below.



b). If 30 girls did not involve themselves in volley ball. Find the value of t.

23a). K is a number, when it is divided by 5, there is a remainder of 2. When it is divided by 8, there is a remainder of 3. Find the value of K?

b). If today is Monday 7th July 2024. What day of the week will it be on the 24th November the same year?

24a). The mean of scores 7, 10, 6, 4 and y is 8. Find the value of y.

b). Workout the median score.

c). Find the probability that a score picked at random is below the mean.

25. A father is 18 years older than his son. In 10 years time, the father's age will be twice as old as the son.

a). What is the father's present age?

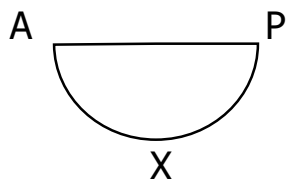
b). How old will the son be in 10 years time?

26. Crane Bank offers a simple interest rate of $2\frac{1}{2}\%$ p.a on all deposits. How much money should I deposit in this bank if I want to get an interest of shs. 200,000/= in 5 years time?

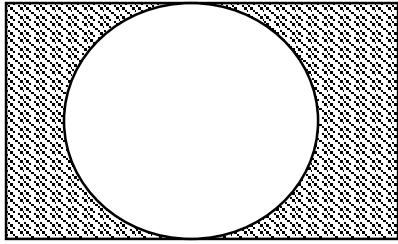
27a). Find the center angle of a regular pentagon.

b). Using a sharp pencil, a ruler and a pair of compasses only, construct a regular pentagon of sides 5cm inside a circle.

28a). The diagram below is of a semi-circle. If arc AXP is 33cm, find the length AP
(use $\pi = 22/7$)



b). A circular flower garden of area 154cm^2 was dug in the middle of a rectangular compound of length 70cm as shown below.



i). Find the radius of the flower garden.

ii). Calculate the area of the remaining compound.

29. Tr. Jafari bought 500 mangoes at shs. 250 each. He sold 100 mangoes at shs. 350 each and the rest at shs. 300 each. Calculate the profit he made.

30. The base area of the cylindrical tin below is 1540cm^2 .



a). Find its volume.

b). How much water does the above tin hold when completely full?

31a). Convert 79 to senary base.

b). Find the value of q: $2q^2 = 112_{\text{five}}$

32. Given the equation of the line K is $y = x + 2$. Complete the table below

- 4	—	—	2	1	0	X
—	- 1	0	4	—	2	Y

END