ERIA JUNIOR SCHOOL NGOMANENE GOMBA

P.7 TERM ONE EXAMINATION 2023
SET THREE
MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.

Random No.						rsonal No.		

Candidate's Name: ……………………………………………………………………………….

Candidate's Signature: ……………………………………………………………………….

School Random No. …………………………………………………………………………

District ID:………………………………………………………………………….

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. The paper has 10 printed pages.

2. Answer all questions. 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 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 in your work and handwriting that cannot easily be read may lead to loss of marks.

6. Do not fill anything in the table indicated: "For Examiners' use only" and boxes inside the question paper.
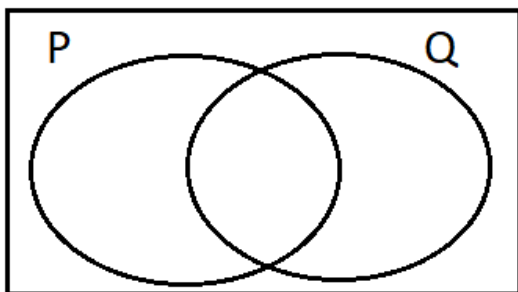
FOR EXAMINERS' USE ONLY		
Qn. No	**MARKS**	**EXR'S Sign**
1 – 5		
6 – 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

Turn over

1. Add: 5   8
                   - 2   3
      _____

      _____

2.   Solve: 3k + 2 = 20

3.   Shade (P-Q)complement on the Venn diagram below.

4.   Find the next number in the sequence below.
      81, 27, 9, 3, 1, _____

5.   The area of a triangle is 27dm². Find its base if the height is 9dm.

6.   Simplify: -7 + -5

7.   Simplify: $\frac{1}{2} - \frac{2}{3}$

8. Find the range of 4, ⁻3, 0, 1 and ⁻2.

9. Change 2.3kg to grams.

10. Round off 21.95 to the nearest tenths.

11. 6 books cost sh. 4800. Find the cost of half a dozen of the same type of books.

12. A certain meeting started at 10:25 p.m and ended at 1:55 a.m. How many hours did it take?
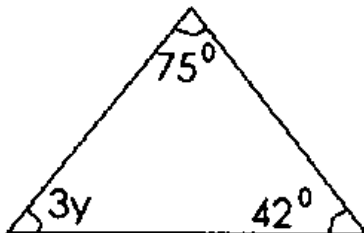
13. Change 123$_{four}$ to a decimal numeral.

14. Using a ruler, a pencil and a pair of compasses only, construct an angle of 120°

15. Given that set P has ones subset. Find n(P)

16. The LCM of two numbers is 36. Their GCF is 3. If one of the two numbers is 9, find the second number.

17. Write **Twenty and five hundredths** in figures.
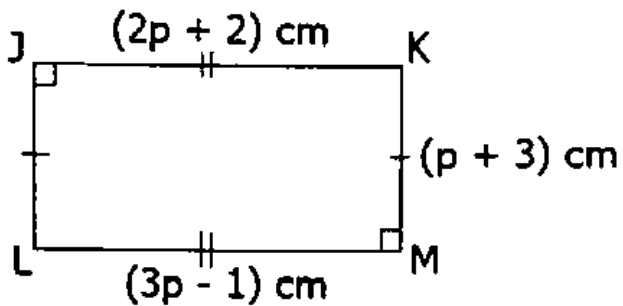
18. Find the value of y in the diagram below.

19. Work out $(29 \div 3) + (16 \div 3)$ using distributive property.

20. Solve: $2^p \times 3^3 = 108$

21. Below is rectangle JKLM. Use it to answer the questions that follow.

   a) Find the value of p. (2 marks)
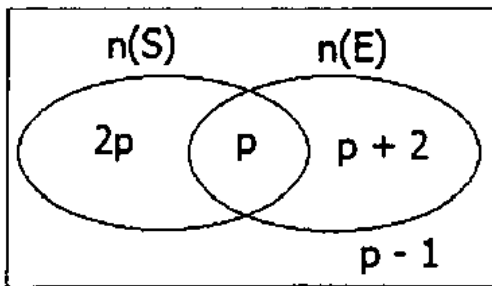
   b) Find the length of diagonal KL. (4 marks)

22. a) Given that ¼ of a number is 12. Find the number. (2 marks)

b) Simplify: $\frac{2}{3} \times \frac{3}{4} \div \frac{1}{2}$ (2 marks)

23. The Venn diagram below shows the number of pupils who like English (E) and Science (S). Use it to answer the questions that follow.

a) Given that 21 pupils do like Science, find the value of p.   (3 marks)

b) Find the total number of pupils in the class.   (2 marks)

24. Abby, Branice and Carol shared some money in the ratio of 3:5:4 respectively. If Branice got sh. 6,000 more than Abby, how much money did they share altogether?   (5 marks)

25. a) Using a ruler, a pencil and a pair of compasses only, construct a triangle ABC where AB=7cm, angle ABC= 45° and angle BAC =60°.   (4 marks)

   c) Measure angle ACB.   (1 mark)

26. Sasha went to the supermarket and bought the following items.
   ❖ $1\frac{1}{2}$kg of meat at sh. 13000 each kg.
   ❖ 3 litres of milk at sh. 3200 per litre.
   ❖ 500gm of sugar at sh. 5000 per kg.
   a) Calculate het total expenditure.   (4 marks)

   b) If she went with a fifty thousand shilling note, find her change. (1 mark)

27. A pupil scored the following marks.

Marks	90	60	h	40
Number of pupils	2	3	4	1

a) How many pupils did the test? (2 marks)

28. a) What is 6 in base five? (2 marks)

b) Find the value of k in $103_k = 54_{seven}$ (3 marks)

29. a) Find the supplement of 125° (2 marks)

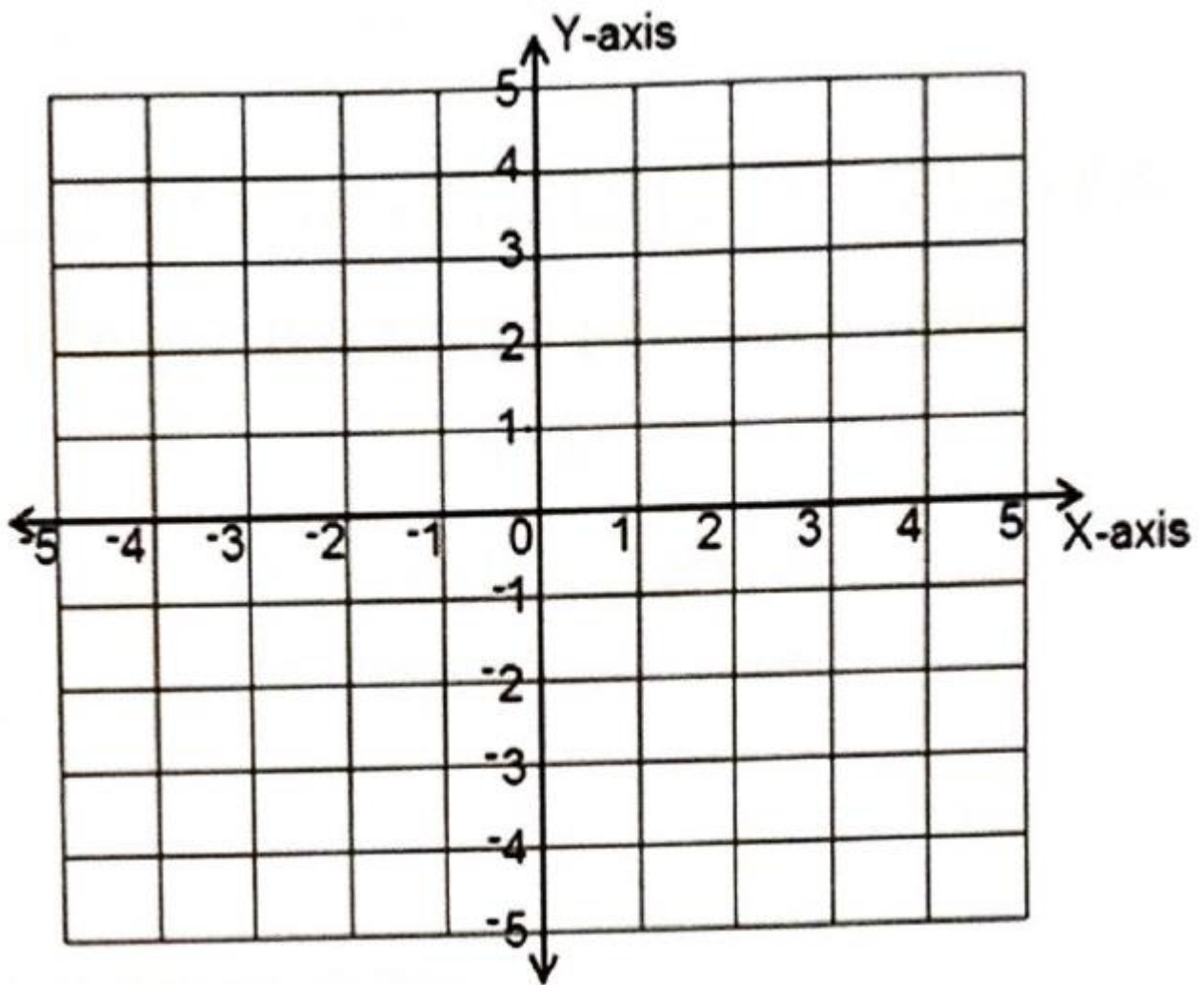b) What angle is a quarter of its complement? (3 marks)

30. a) Solve: 2(x - 3) = 14   (2 marks)

b) Acero is 14 years younger than Murungi. In 10 years' time, Murungi will be twice as old as Acero. How old will Acero be then?   (3 marks)

31. A worker was given a task of carrying 76 books from the store to the library. Every trip, he carried 4 less books than the previous trip. If he made four trips, how many books did he carry in the first two trips?   (5 marks)

32. a) Plot K(-1, 4), L(-3, -1) and M(2, -1) on the grid graph below. (3 marks)

b) Join K to L, L to M, M to K and find the area of the figure formed.
(2 marks)

THE END