KAMPALA GIANT SCHOOLS EXAMINATION COMMITTEE (KGSEC)

PRIMARY LEAVING MOCK EXAMINATION

2023

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	**Random No.**							**Personal No.**		

Candidate's Name: .....

Candidate's Signature: .....

School Random No. .....

District ID: .....

Read the following instructions carefully:

1. Do not write your **school** of **district** name anywhere 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** answers to both sections **A** and **B** must be written in the spaces provided.

4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.

5. **No calculators** are allowed in the examination room

6. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks.**

6. Do not fill anything in the table indicated: **"for examiner's use only"** and boxes inside the question paper.

FOR EXAMINER'S USE ONLY

Qn. No	MARK	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: 40 MARKS

Answer all the questions in this section.

Questions 1 to 2 carry two marks each.

1. Work out: 6.214 + 0.734

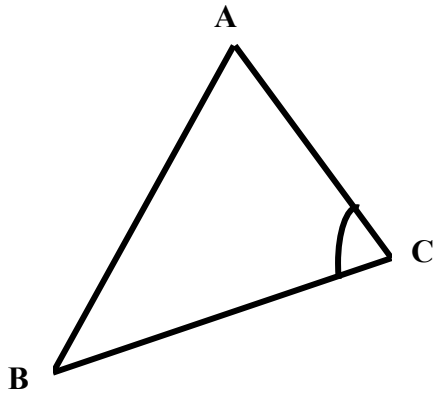
2. Write CXLIV in Hindu-Arabic numerals**.**

3. Work out: $3\overline{)1212}$

4. Given that M = {1,2,3,4,7} and N = {1,4,5,6,7,8}. Find **n(M)'.**

5. Work out the sum of the third and the fifth triangular numbers

6. a) Using a ruler, pencil and a pair of compasses only, bisect angle BCA in the triangle ABC below.

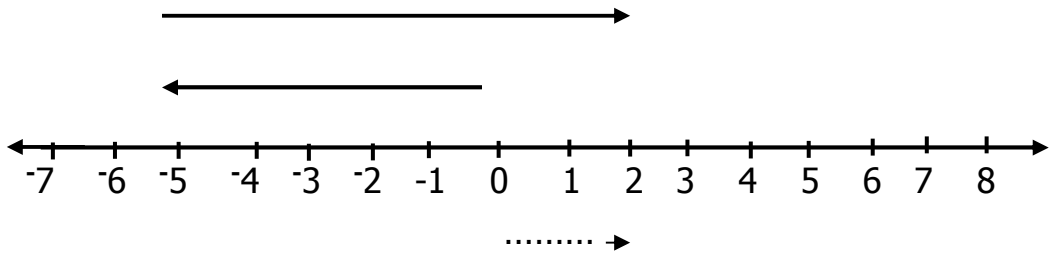


7. Complete the mathematical expressions below correctly.

(i) 9 + (2 + 3) = ……. + (9 + 2)

(ii) 48 = …… × 4

8. Write the number operation represented on the number line below



9. Solve: 5a – 3 = 2a + 3

Turn over

10. Butanakya had a box containing 600ml bottles of water. If the total amount of water in the box was 18 litres, how many bottles were in in the box?

11. In a bag there are red balls and white balls if $\frac{3}{4}$ of them are red and 12 balls are White, find the total number of balls in the box.

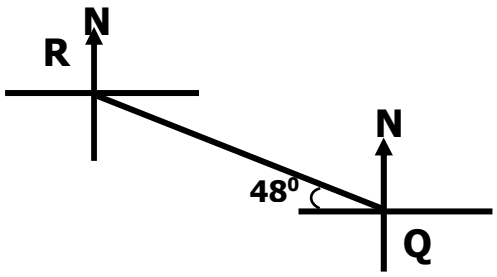
12. Work out the value of 2 in the number 234_{five}

13. Express a quarter past midnight in a 24 hour clock time.

14. Round off 406 to the nearest tens

15. The average age of 7 pupils is 12 years. Three more pupils aged 6 years, 3years And 7 years joined the group. Find the average of all the pupils?

16. The diagram below shows the positions of two towns Q and R. Use it to find the direction of town R from town Q.



17. The price of a phone was increased by 20%. If the new price of the phone is sh. 600,000, find the price of the phone before the increment.

18. Joan covered a certain distance in 1 hour at a speed of 60km per hour and another 100km at a speed of 50km per hour. Calculate the total time she used altogether

Turn over

19. Given that x = $\frac{1}{2}$, y = $\frac{3}{4}$ and z = $\frac{1}{4}$. work out : **x + (y – z)**

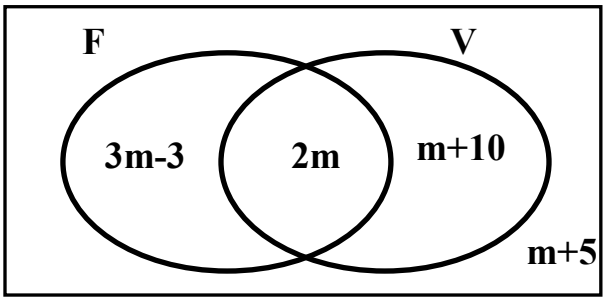
20. If today was Friday, what day of the week was it 45 days ago?

SECTION B: 60 Marks

Answer all the questions in this section.

Marks for each question are indicated in brackets.

21. The Venn diagram below shows pupils in a school who enjoy playing football (**F**), Volleyball (**V**) and other games. Study it carefully and use it to answer the questions that follow.



(a) Given that the number of players who play football is equal to those who do not play any of the two games, find the value of **m**. (02marks)

(b) How many pupils enjoy playing games in the whole school? (02 marks)

(c) What is the probability of picking a pupil at random who plays other games? (01 mark)

Turn over

22. (a) Work out; $1100_{two} - 11_{two}$ (02 marks)

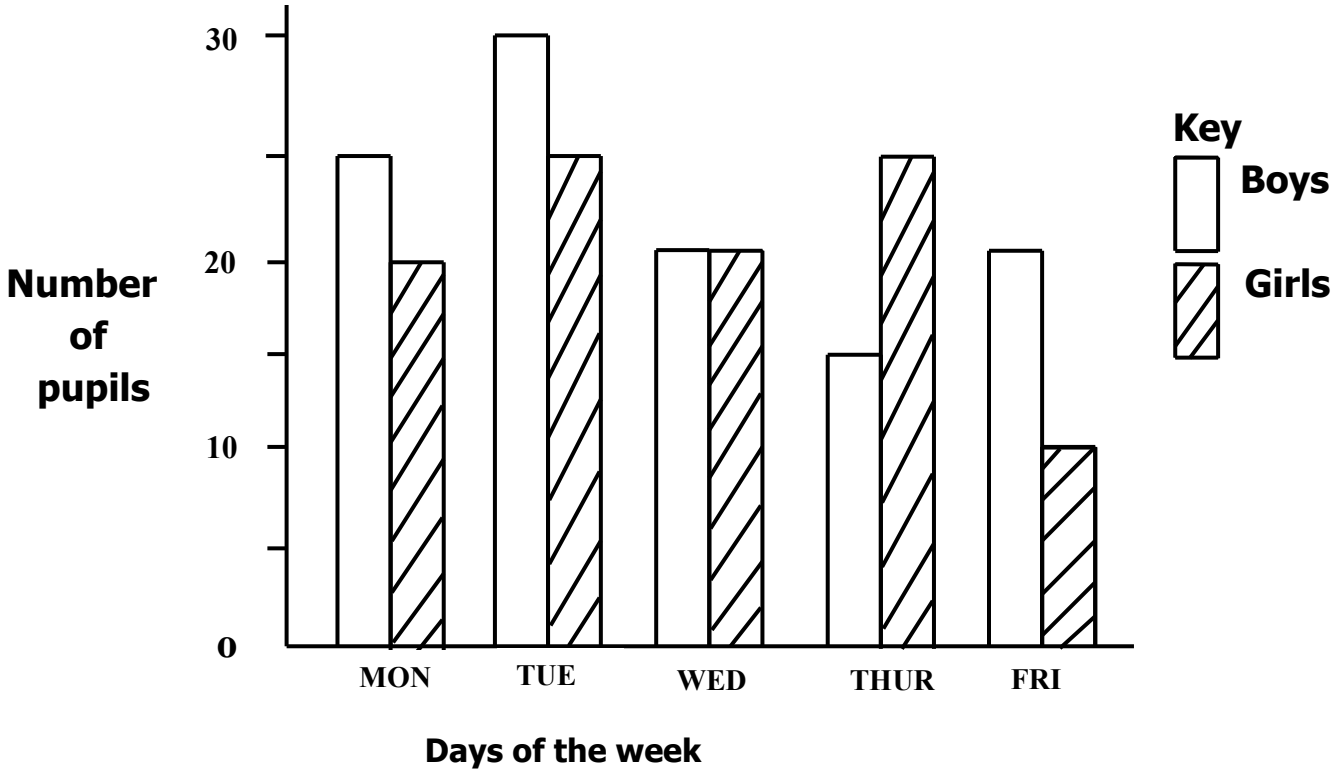
(b) Given that $23_n = 13$, find the value of n (03 marks)

23. The number of pupils in P.4A,P.4B and P.4C in Namirembe infants school is in the ratio 3:4:5 respectively.

(a) If there are 20pupils less in P.4A than in P.4C, how many pupils are in P.4 altogether? (03marks)

(b) Find the number of pupils in P.4B (02marks)

24. The bar graph below shows the attendance of pupils of P.5 class in a certain week. Study it carefully and use it to answer the questions that follow.



If all the pupils attended on Tuesday;

(a) how many pupils are in P.5 altogether? (02 marks)

(b) how many girls were absent on Wednesday? (01 mark)

(c) work out the average attendance of the pupils for the whole week. (03 marks)

Turn over

25. (a) Simplify: $\frac{0.24 \times 0.3}{0.8}$ (03marks)

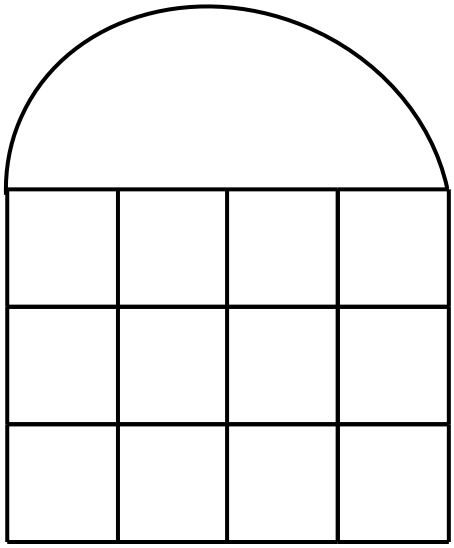
(b) Express the recurring decimal 0.33… as a common fraction. (02marks)

26. Nissi bought the following items which she used to make samosas.
1 kg of sugar at sh. 5000
$1\frac{1}{2}$ litres of cooking oil at sh. 8000 per litre
2500g of wheat flour at sh. 5000 per kg

(a) How much money did she spend altogether? (03marks)

(b) If she sold all the samosas and got sh. 50,000. How much profit did she make? (02marks)

27. The diagram below shows a window with square designs and a semi-circular top. Each square design has side 7cm. Study the diagram and use it to find the area of the whole window. Use $\pi = \frac{22}{7}$ (05marks)



28. (a) Using a ruler, a pencil and a protractor only, draw triangle **KLM** in which **KL = 6cm**, **LM = 4cm** and angle **KLM = 75^0** (04marks)

(b) Measure **MKL**.=……. (01mark)

29. GoodLuck planted 39 trees in 3 days. If she planted 4 more trees each day than the previous day, how many trees did she plant on the second day?
(04marks)

30. The time table below shows how a taxi travels from Kamuli to Kampala. Study and use it to answer the questions that follow.

Town	Arrival time	Departure time
Kamuli		9:00 a.m
Buwenge	9:45 a.m	10:00 a.m
Jinja	11:15 a.m	11:30 a.m
Lugazi	12:00 noon	12:20 p.m
Kampala	1:00 p.m	

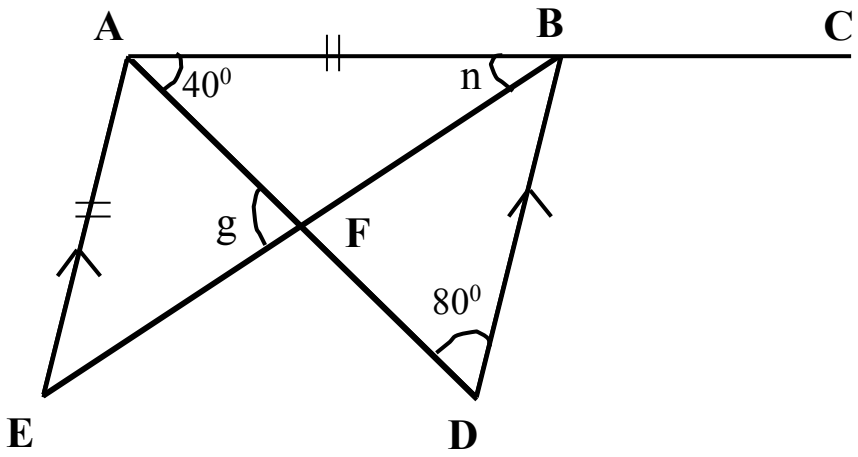
(a) At what time does the taxi leave Kamuli? (01mark)

(b) How long does the taxi stay at Lugazi? (02marks)

(c) If Kampala is 180 km from Jinja, find the average speed of the taxi from Jinja to Kampala. (03marks)

Turn over

31. In the figure below, ABC is a straight line. Line AB = AE. Angle BAD = 40^0 and angle ADB = 80^0. Line AE is parallel to line BD. Study and use it to answer the questions that follow.



Find the size of angle;

(a) angle n (02marks)

(b) angle g (02marks)

Turn over

32. Jotham borrowed a certain amount of money from a village SACCO at a simple interest rate of 10% per annum for 3years. If he paid back a total sum of sh.650,000 after the 3years,

a) How much money did he borrow? (03marks)

b) Work out the interest he paid to the village SACCO after the 3years (02marks)

END