MBARARA ARCHDIOCESE

PRE-PRIMARY LEAVING EXAMINATION 2022

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No. :

School EMIS						Personal 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**
2. Section **A** has 20 questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. All answers to both Sections A and B must be written in the spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary crossing of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated; For Examiner's use only.

FOR EXAMINER'S USE **ONLY**

Qn. No	MARK	SIGN
1 – 5		
6 – 10		
11 – 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

Turn over

SECTION A: 40 MARKS

*Questions **1** to **20** carry **2 marks** each*

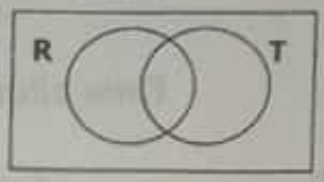
1. Workout: $32 \div 8$.

2. List down all the factors of 63.

3. Write 98,042 in words.

4. Workout: $^{-}8 - {}^{+}3$.

5. In the Venn diagram below, shade the complement of set **T**.

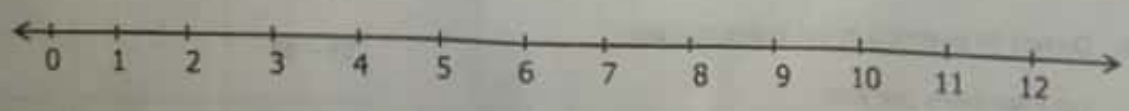


6. A school bursar bought 4900g of sugar. Find the quantity bought in kilograms.

7. Using a ruler and a pair of compasses, construct an angle of 75^{0} in the space provided below.

8. Simplify: $3(w-2)-(2w+5)$.

9. Workout 3 x 4 using a number line below.



10. Find the mean of; 3y, 1, y+7 and 4.

11. Express 403.6 in standard form.

12. Convert 143_{five} to a decimal base.

13. Timothy withdrew ten thousand shilling notes numbered consecutively from DK634752 to DK634836. How much money did he withdraw?

14. The area of a square flower garden is $400m^2$ .Calculate the length of one side.

15. A staff meeting that lasted $1\frac{1}{4}$ hours ended at 1:20pm. At what time did it start?

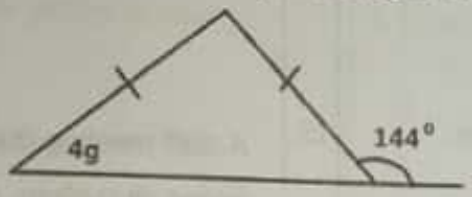
16. The number of pupils in a school last year was 960. This year, it increased in the ratio of 9:8. Find the new number in the school.

17. Bilal had $\frac{2}{5}$ of a cake and gave 25% of it to Tom. What fraction did he remain with?

18. Express CDXCVI in hindu Arabic numerals.

19. A motorist covered 72km in 2hours 15minutes. Calculate the motorist's speed in km/h.

20. Find the size of the angle marked g in the figure below.

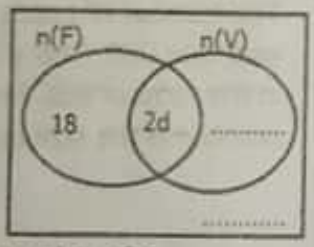


SECTION B (60 MARKS)

Marks for each question are indicated

21. In a group, 26 people play football (F), 28 play volley ball (V), 2d play both games while those who play other games are half of those who play both games.

(a) Complete the Venn diagram below. *(02 marks)*



(b) Find the value of d. *(02 marks)*

(c) How many people are in the group? *(01 mark)*

22. One of the exterior angles of a regular polygon is $(n-4)^0$. If the polygon has 6 sides;

(a) Find the value of **n**. *(03 marks)*

(b) Calculate its interior angle sum. *(02 marks)*

23. The table below shows the performance of a P.7 class in a math test.

Marks	75	90	60	35
No. of pupils	2	1	m	4

(a) Find the range of the scores. *(01 mark)*

(b) If their mean score was 56, find the value of **m**. *(03 marks)*

24. (a) Solve : $3 - 4 = P$ (finite 6). *(02 marks)*

(b) If today is Wednesday 20th August. What day of the week was it on the 12th of June the same year? *(03 marks)*

25. A bucket full of paint weighs 18.23kg. The empty bucket weighs 4.23kg. Find the mass of the bucket when it is $\frac{3}{7}$ full of paint. *(05 marks)*

26. The table below shows the rates at which different currencies are bought and sold in a commercial bank.

CURRENCY	BUYING PRICE	SELLING PRICE
1 Pound Sterling (GBP)	UGX 4300	UGX 4500
1 Kenya shillings (KES)	UGX 36	UGX 38
1 US dollar (USD)	UGX 3600	UGX 3700

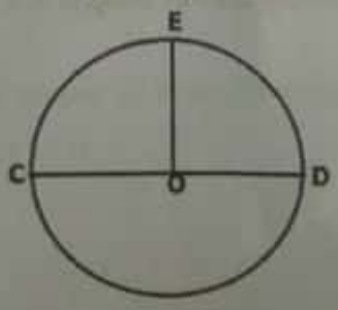
(a) Bengo had UGX 666,000. How many US dollars did he get from the bank? *(02 marks)*

(b) Toto paid KES 18,000 for a T.V set. Find the cost of the same T.V set in Pound Sterling. *(03 marks)*

27. (a) Given that $2n = 6$, $r = -4$ and $t = 2$. Find the value of $\frac{n\,r}{t}$ (03 marks)

(b) Dombo is 12 years old and Mujoga is 30 years old. After how many years will Mujoga be twice as old as Dombo? (02 marks)

28. In the figure below, CD = (3k − 3)cm and OE = (k + 6)cm.



(a) Find the value of **k**. *(3 marks)*

(b) Calculate the area of the figure. *(02 marks)*

29. Namulumba had $\frac{3}{4}$ of a watermelon and gave $\frac{1}{6}$ of it to Logose. She was left with 300gm. Find the total mass of the watermelon. *(05 marks)*

30. A ship sailed 500km from Port **A** on a bearing of 230° to Port **B**. From Port **B**, it changed direction and sailed 600km to Port **C** on a bearing of 120°.

(a) Draw a sketch showing the above ports. *(03 marks)*

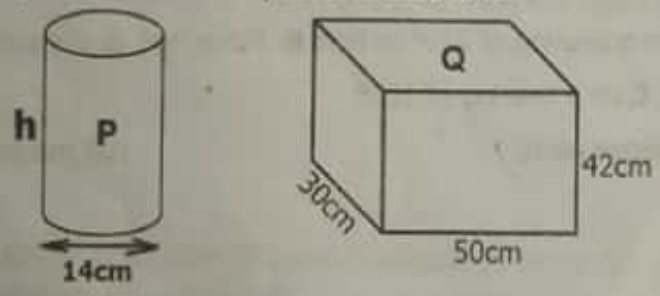
(b) Using a scale of 1cm to represent 100km, draw an accurate figure showing the 3 ports. *(03 marks)*

31. A motorist covered 360km from town **P** to town **Q**. His car uses 4 litres of petrol for every 40km.

(a) How much fuel does the motorist need to cover the journey between town **P** and town **Q**? *(02 marks)*

(b) If a litre of petrol costs sh.6530, how much money will the motorist need to cover a certain distance at a speed of 80km/h for 3 hours? *(03 marks)*

32. In the figure below, 6 layers of cylindrical tins (**P**) can be packed into box **Q**. Study it carefully and answer the questions that follow.



(a) Find the value of **h**. *(02 marks)*

(b) How many cylindrical tins can be packed on the base of box **Q**? *(03 marks)*

END