MBARARA ARCHDIOCESE
PRE-MOCK EXAMINATION 2024
MATHEMATICS

Time allowed: 2 hours 15 minutes

Index No:

School EMIS					Personal No.		

Candidate's name: ....

Candidate's signature: ....

School Name: ....

Parish: ....

Read the following instructions carefully:

The paper has two sections: **A** and **B**

1. Section **A** has 20 questions (40 marks)

2. Section **B** has 12 questions (60 marks)

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. Diagrams should be drawn in pencil.

5. Unnecessary crossing of work may lead to loss of marks.

6. Any handwriting that cannot be easily read may lead to loss of marks.

7. Do not fill anything in the boxes indicated;

   For Examiner's use

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		

SECTION A

1. Work out   2 7 5

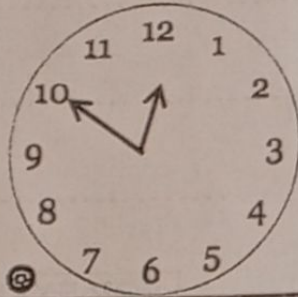   _____- 5 3_____

   _____

2. Write 54,045 in words

_____

3. Given that $a=2$ and $b=-1$ find the value of $a^3 - 2b$

_____

4. Find the next number in the sequence

   3, 4, 7, 12, 19, 28, _____

5. The time shown on the clock face below is in the afternoon. Write it in 24-hour clock
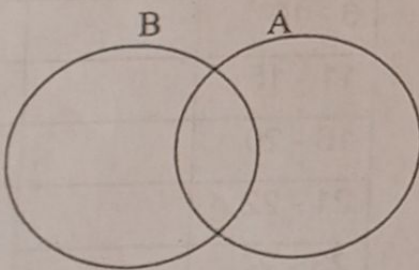
6. Simplify

   $$\frac{9}{21} \div \frac{3}{7}$$

7. Work out

   $(72 \times 5) - (5 \times 48)$

8. Shade either set A or set B

   B   A

9. Find the value of 3 in 4321 five.
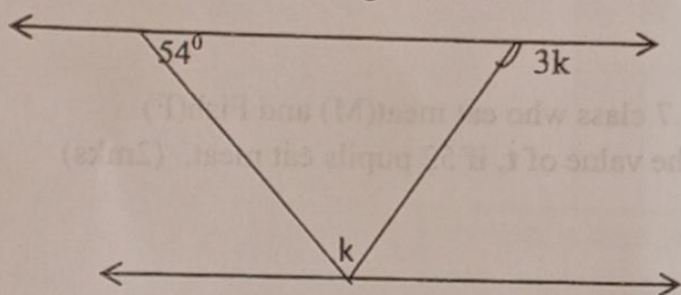
10. Find the G.C.F of 18 and 27

11. The cost of three US dollars is Ug sh. 10,950. Find the number of dollars that Martha will buy with Ug. sh. 255,500

12. Using a pair of compasses, a ruler and a pencil only construct an angle of 75^0 at point K

K •

13. Work out the median of 1, -2, 3, -3, 4 and 3

14. Find the value of k in the diagram below

15. Given that Set M = $\{2,3,5,7,11\}$, Set N =$\{1, 3,5,7,9,11\}$. Find n [N-M].

16. A girl had a cup ¾ full of tea, she drank $\frac{2}{9}$ of the tea in the cup. Find the fraction of the cup remained with tea.

A boy bought 4 packets of biscuits each weighing 350g. Find the weight of the biscuits in kilogrammes
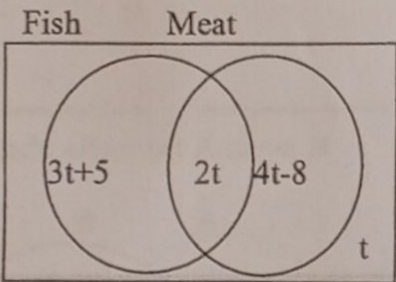
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17. Find the value of g

2-5=g(finite 7)

19. Work out 20÷5x4

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20. A motorist rode 150km in 75 minutes, find the speed of the motorist in kilometres per hour

SECTION B

21. The diagram below shows the number of pupils in a p.7 class who eat meat(M) and Fish(F)

Fish   Meat

3t+5   2t   4t-8

t

(a)   Find the value of **t**, if 52 pupils eat meat. (2mks)

(b) Find the total number of pupils in the class

(1mk)

(C)   Work out the number of pupils who do not eat fish at all. (1mk)

22. A school Bursar went to the market and bought the following items

   2kg of meat at sh. 15,000 per kg
   4kg of rice at sh. 5,000 each kg
   3 ½ kg of sugar at sh.4,600 per kg
   1 ½ kg of tea leaves at sh. 1,500

If the Bursar was given a change of sh. 23,000, find the total amount of money, he went with

(05 marks)

A packet containing 2 dozen of pens weighs 9.6kg, if the empty packet weighs 2.4kg. Find the weight of each pen in grammes.

(04 marks)

23.(a) Find the sum of the value of 6 and the value of 9 in the number 6539

(03 marks)

(b) Work out $1010_{five} - 344_{five}$

(02marks)

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24. A bus reached Mbarara from Kasese at 3:20pm, if the journey took 100 minutes

(a) Find the time at which the bus left Kasese   (03 marks)

(b) If the distance from Kasese to Mbarara is 150km, find the average speed of the bus in metres per seconds   (03 marks)

25.(a) Solve $\frac{1}{2}$ n -3 =n+1 (03 marks) | (b) Simplify 4g-7k-2g+3k   (02 marks)

26. A cuboid of sides 2cm by 3cm by 4cm has a mass of 2kg. find the mass of a cuboid made by similar materials of sides 4cm by 6cm by 8cm. (6mks)
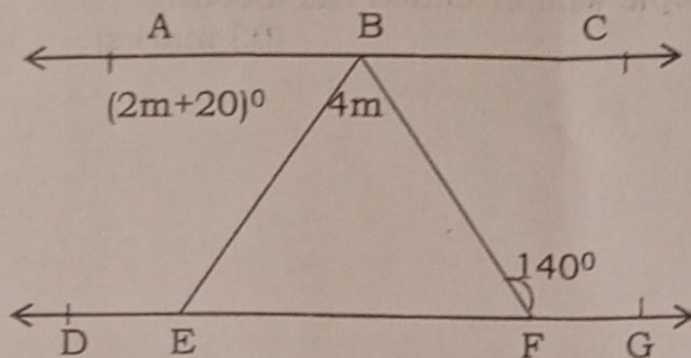
27. The average of 12, g, 7, g+1, g and g-2 is 9.

a) Find the value of g.   (03 marks)

(b) Work out the range of the numbers   (01 marks)

28.(a) Find the value of m in the diagram below   (02 marks)

$$A \qquad B \qquad C$$

$(2m+20)^0$ $\quad$ $4m$

140^0

$D \quad E \qquad\qquad F \quad G$

b) Find the size of the angle marked FEB   (02 marks)

29.Given the digits 3,5, and 0
(a) Form all the four numbers that will be formed using the above digits. (04 marks)

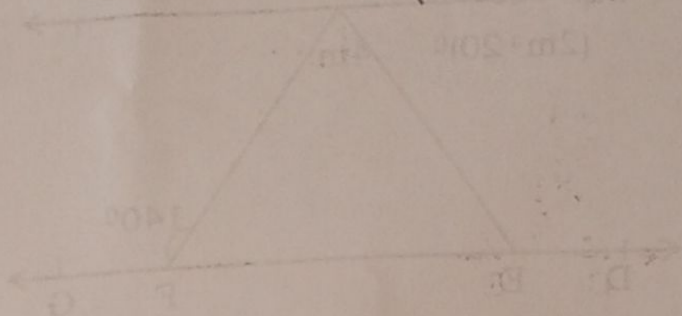(b) Find the difference between the largest and the smallest numbers formed
                                                        (01mark)

30.(a) Simplify   (03 marks)

$$\frac{1}{2} + \frac{1}{4} \div \frac{3}{8} \times \frac{3}{10}.$$

b) In L.C.1 meeting the ratio of men to woman was 3:5 respectively. 30 women attended the meeting. Find the total number of people who attended the meeting.

(03 marks)

31. Using a pair of compasses, a ruler and a pencil only construct a quadrilateral ZWXY such that WX=6cm, YX=4cm and angle W=90°   (04 marks)

(b) Measure angle YWX   (01 marks)

END