



DIVINE EDUCATION CENTRE

PRIMARY LEAVING EXAMINATION-2023

MATHEMATICS (ITEM 3 of 4)

Time allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District ID No.

--	--	--	--

Read the following instructions carefully:

1. Do not write your **school** or **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**. This paper has **12 pages** printed altogether.
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 be easily read may lead to loss of marks.
7. Do not fill anything in the table indicated **"For examiners' use only"** and the 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: (40 MARKS)

Answer ***all*** questions in this section

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

1- Workout: $3^2 - 1^2$

2- Express CDXCVI as Hindu Arabic numeral

3- Work out: $2\frac{1}{4} \div \frac{3}{4}$

4- Given that $Q = \{ p, e, n \}$, list all the proper subsets in Q .

5- Round off 7952 to the nearest hundreds.



6- Write the number which has been expressed in scientific notation to give:

$$5.26 \times 10^3$$

7- In a class, the number of pupils increased to 45 pupils in the ratio of 3: 2.
Calculate the number of pupils in the class before.

8- Find the 12th triangular number.

9- Using a pair of compasses , ruler and a pencil only, construct an angle of 105°

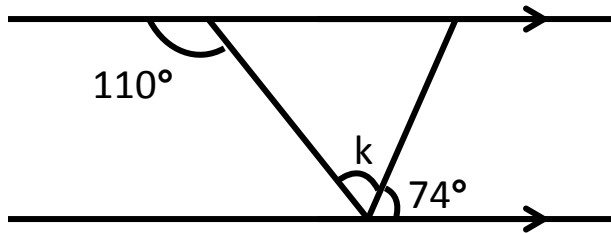
10- Find the next number in the sequence:
30, 29, 25, 16, _____



11- A trader bought 4.5 litres of milk and packed all the milk in 500 ml packets.
How many packets did the trader get from all the milk?

12- Express 10:35 a.m as a 24 hour clock system.

13- Find the value of k in the figure below.



14- A car covered a distance of 60km using a speed of 80 km/hr .
For how long did the car take to cover the journey?

15- The mean of 1, 4, 5, m and 7 is 4. Find the value of m



16- Subtract $w - 2$ from $3w + 1$

17- John bought 10 dozens of pens at sh.36,000. He sold each pen at sh.500.
Calculate the profit he made.

18- Today is Thursday, what day of week was 24 days ago from now?

19- Express 0.3... as a common fraction in its lowest form.

20- There were 25 pupils in a line. James was standing in the Pth position while counting from either sides of the line.
Find James' position in the line.



SECTION B :60 MARKS

Answer ***all*** questions in this section

Marks for each question are indicated in the brackets.

21- Two numbers **x** and **w** are in the ratio of 3:4 respectively .

If their Greatest Common Factor (GCF) is 3.

a) Find the value of **x** and **w**.

(02marks)

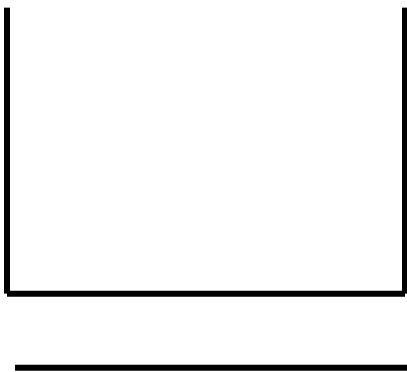
b) Find the Lowest Common Multiple (LCM) of **x** and **w**.

(02marks)

22- a) Study the abacus below carefully and use it to represent the number 32_{five}

Tens

Ones



(03marks)

b) Work out: $2 \frac{1}{3} \times 2$

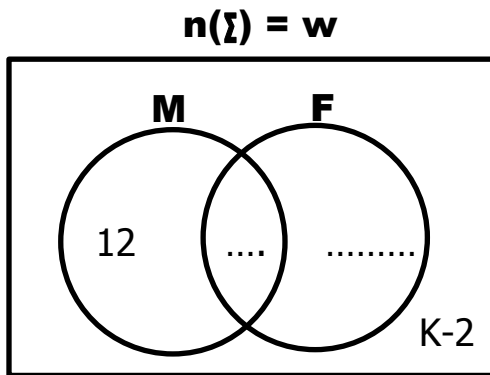
(02marks)



23- In a class, 12 pupils enjoy meat(M) only, $(k+3)$ enjoy both meat and fish, $2k - 1$ enjoy fish (F) only while $k - 2$ enjoy non of the two and 12 pupils enjoy meat complement.

(a) Use the information above to complete the venn diagram below.

(02marks)



(b) Find the value of k .

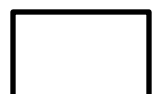
(02marks)

24- a) Simplify: $\frac{0.36 - 0.24}{0.06}$

(02marks)

b) Work out: $24 \div \frac{2}{3}$ of 12

(02marks)



25- a) Solve for m: $5m - 3(m + 1) = 5$

(03marks)

b) Solve the inequality $6 - 2k > 10$ and find the solution set. **(03marks)**

26- The table below shows the rate at which different currencies were bought and sold at a certain forex bureau .Use it to answer the questions that follow.

Currency	Buying in Ug.sh	Selling in Ug.sh
1 US dollar(\$)	3500	3900
1 Euro(£)	3700	4000
1 Kenya shilling	20	28

a) Akello had Ug.sh.1,950,000 and exchanged it for United States dollars.
How many United States dollars did she get?

(02marks)

b) Ronald had 200 US dollars. He bought a smart phone in Euros.
Calculate the cost of the phone in Euros.

(03marks)

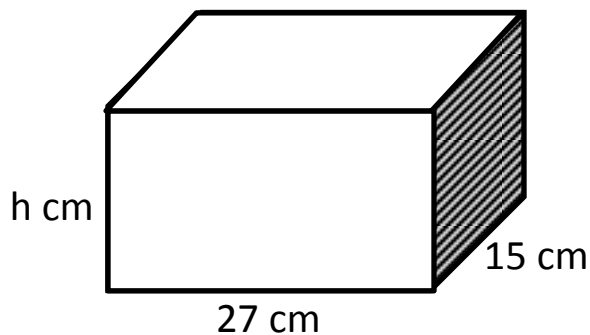


27- In a village, 60% of the people are males and the rest are females.

If $\frac{1}{3}$ of the males are men and 50% of the females are girls.

Calculate the total number of people in the village if the village has 120 children.
(05marks)

28- The diagram below shows a rectangular box made by Joram using a wire of total length 224 cm .



a) Find its height.

(03 marks)

b) Find the area of the face which is shaded.

(02 marks)



29- a) During a quiz competition, a secretary awarded 5 points for every correct response and deducted 2 points for every wrong response. The questions asked were ten ,if Sandrah scored 36 points, how many questions did she give a wrong response ?
(03 marks)

b) If Micheal gave 4 correct responses, how many points was he given?
(02 marks)

30- The table below shows the arrival and departure time for a bus moving from Mbale to Kampala.

Town	Arrival	Departure
Mbale		08 40 hrs
Iganga	10 00 hrs	10 20 hrs
Jinja	11 20 hrs	11 50 hrs
Mukono	13 20 hrs	14 00 hrs
Kampala	17 20 hrs	

a) How long did the bus take to travel from Iganga to Mukono?
(01 mark)

b) At what time did the bus reach Kampala in the 12 hour clock system?

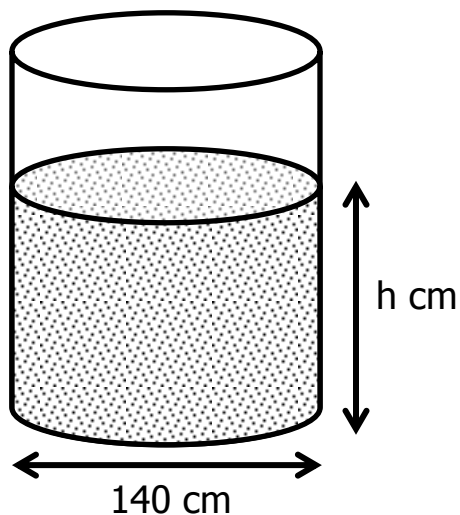
(01 mark)

c) If the distance from Mbale to Kampala is 520 km, calculate the average speed of the bus for the whole journey.

(03 marks)



31- Study the cylindrical tank below carefully and use it to answer the questions that follow.



If the tank is $\frac{3}{4}$ full of water and 770 litres of water are needed to fill it to its full capacity. Find the height of water in the tank.

(05 marks)

32- The Shop is Southwest of Sarah's Home at a distance of 25 metres.

The School is 35 metres away from the Shop on a bearing of 120° .

a) Draw a sketch diagram and show the three places. **(01mark)**

b) Using a scale of 1cm to represent 5 metres, draw an accurate diagram for the three places. **(04marks)**

c) Find the shortest distance in metres from Home to the School. **(01marks)**

****END****

