## DIVINE EDUCATION CENTRE

## PRE MOCK ASSESSMENT -2023

## MATHEMATICS (ITEM 1 of 3)

### *Time allowed: 2hours 30 minutes*

| Random No. | | | | | | Personal No. | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**Candidate's name:** ...............................................................

**Candidate's Signature:** ...........................................................

**District ID:**

| | | | |
|---|---|---|---|
| | | | |

## 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 | | |

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1- Workout:
$$\begin{array}{r} 3\ \ 2 \\ \times\ \ 4 \\ \hline \\ \hline \end{array}$$

2- Express DXCIV as Hindu- Arabic numeral.

3- Simplify: $\dfrac{2}{3} - \dfrac{1}{2}$

4- Round off 7.984 to one place of decimal.

5- Solve the inequality: $6 - 2r > 4$

6- Simplify: $^{-}3 - {}^{+}6$

7- An English examination ended at 1:35p.m if the examination lasted for 2 ¼ hours, at what time did the examination start?

8- Find the highest number that can be exactly divided by 12 and 18.

9- Using a pair of compasses, ruler and a very sharp pencil only, construct an angle of $135^0$ in the space provided below.

10- Jamirah was given a bundle of 100 consecutive notes numbered from CX1775042. Find the reading of the last note of the bundle.
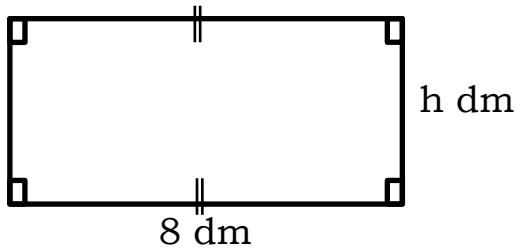
11- Convert $103_{\text{five}}$ to a denary base.

12- Describe the shaded region using set notations.

P    Q
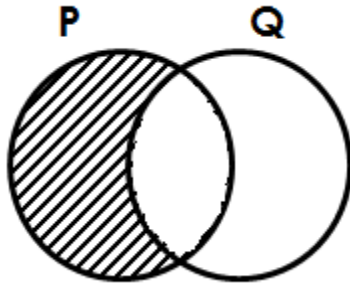
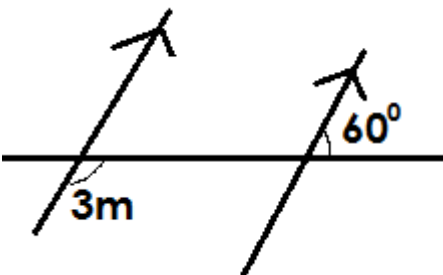13- The perimeter of the figure below is 24dm. find the value of h.

h dm

8 dm

14- Subtract 3k – 1 from 5k

15- A worker was given a penalty of $2\frac{5}{8}$ % off from his June salary of sh.400,000 for reporting late on duty. How much money did he remain with after penalty?

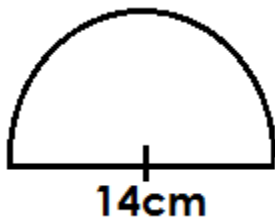16- Find the value of m in the figure below.

60°

3m

17- Given that  represents 6 cups. How many pictures will represent 42 cups?

18- Gloria bought one dozen of exercise books at sh. 6,000. She later sold all the books at sh.700 each book. Calculate the profit she made .

19- Find the total distance round the figure below.



14cm

20- A carpenter hammered nails into a timber at intervals of 30cm each. The length from the first nail to the last nail was 3.6 metres. How many nails did the carpenter hammer into the timber?

## SECTION B:60MARKS

21- Given the digits 4, 0, 5

(a) Write all the 3-digit numerals that can be formed using the above digits. (2marks)

(b) Calculate the sum of the largest and the smallest 3-digit numerals formed in (a) above. (2marks)

22- The venn diagram below shows the number of pupils who enjoy playing football (F) and volley ball (V). Study it carefully and use it to answer the questions that follow.
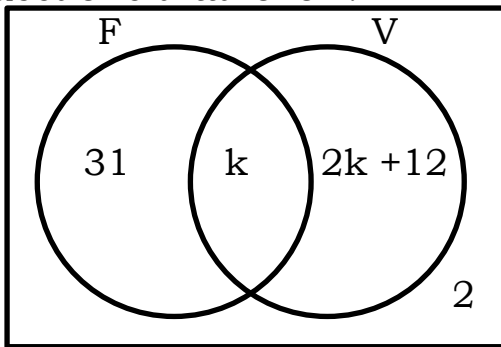


(a) If 53 pupils enjoy playing only one game, how many pupils enjoy playing volleyball? (3marks)

(b) How many pupils are in the class? (2marks)

23- Simon went to the shop with sh. 25,000 and bought the following items.
   ➢ 2kg of sugar at sh. 5800 each kg.
   ➢ 3kg of beans at sh. 3200per kg.
   ➢ 1500ml of milk at sh. 1800 each litre.
   (a) Calculate his total expenditure.                                    (4marks)




   (b) What was his change?                                                (2marks)




24- Jane, Joan and Jolly shared sh. 270,000 in the ratio of 3:4:2 respectively.
(a) How much did each get?                                               (4marks)




(b) How much more money did Joan get that Jane?                          (1mark)

25- The table below shows how pupils performed in a mathematics contest.

| Marks | 80 | K | 95 | 70 |
|---|---|---|---|---|
| Number of pupils | 2 | 3 | 1 | 4 |

(a) How many pupils participated in the contest? (1mark)

(b) Find the mark scored by the 3 pupils if their average mark was 80.5 (3marks)

26- A motorist drove from Iganga to Jinja at a speed of 90km/hr for 2hours. At Jinja, he rested for 30minutes. He later continued to Mukono at a speed of 50km/hr for 3hours.

(a) Find the total distance from Iganga to Mukono. (3marks)

(b) Calculate his average speed for the whole journey. (2marks)

27- Mary carried 36eggs to the house. In every trip, she carried 3 less eggs than the previous one. If she made 3 trips, how many eggs did she carry in the last 2 trips?                                   (5marks)

28- (a) Workout:   $\dfrac{0.21 \times 0.4}{0.07 \times 0.12}$                                   (3marks)

(b) Simplify: $\dfrac{2}{3} - \dfrac{1}{4} + \dfrac{1}{3}$

                                                                (2marks)

29- The interior angle sum of a regular polygon is $720^0$.
(a) Calculate the number of sides of the polygon.                (3marks)

(b) Calculate the size of the exterior angle. (2marks)

(c) Name the polygon. (1mark)

30- Using a pair of compasses, ruler and a pencil only, construct a triangle PQR where line PQ = 7.5cm, angle PQR = $45^0$ and angle QPR = $60^0$.

(4marks)

(b) Measure line PR (1mark)

31- The total distance round the circular police post is 880cm. find the area of the room for the police post. (4marks)
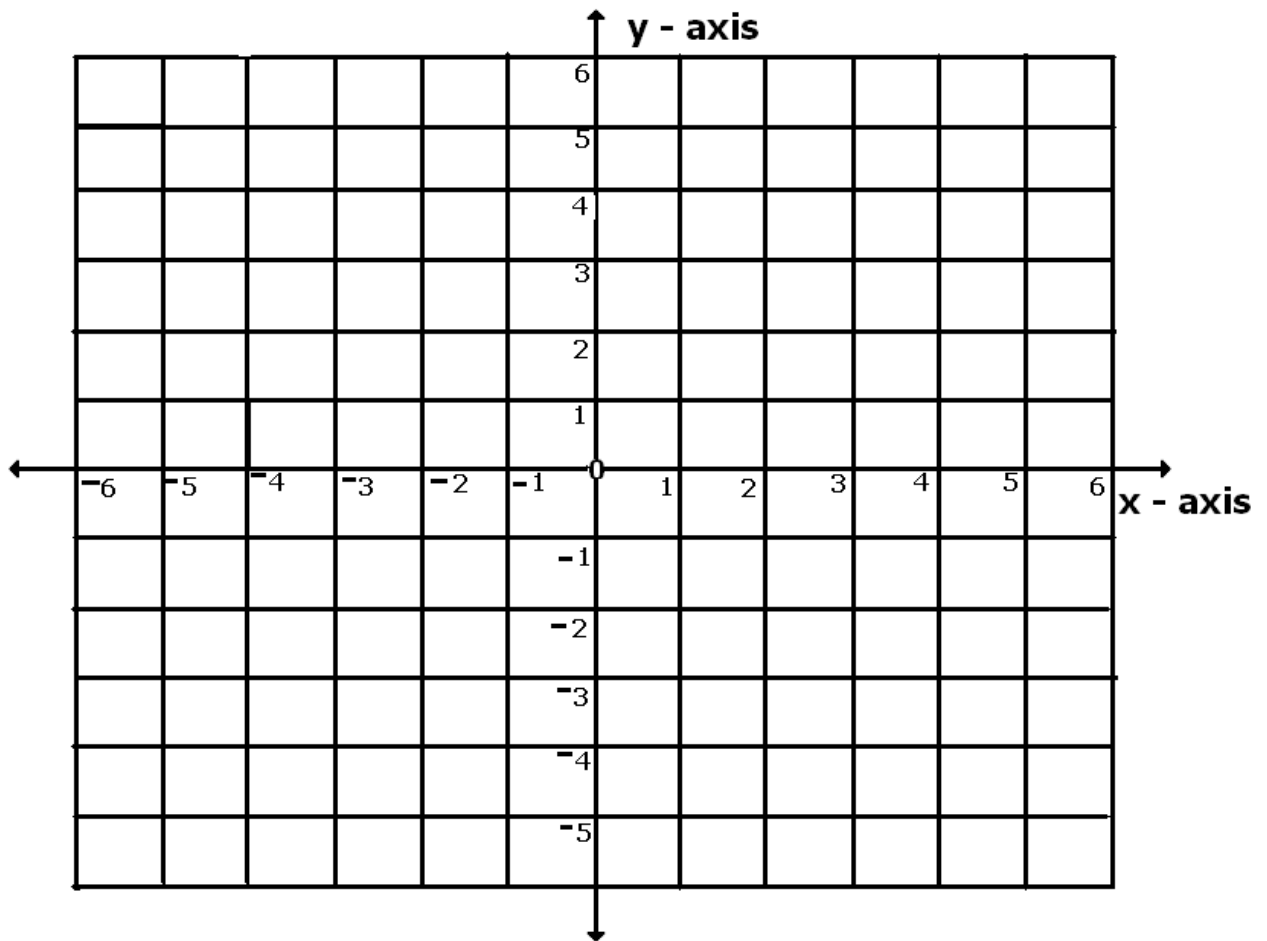
32- Given that the equation of the line h is Y = x + 2

(a) Complete the table below. (4marks)

| X | 0 | 1 | 2 | -2 | ___ | -4 |
|---|---|---|---|----|-----|----|
| Y | 2 | ___ | 4 | ___ | -1 | ___ |

(b) Plot the above coordinates on the graph below to show the line.

(2marks)

**\*\*END\*\***