DIVINE EDUCATION CENTRE

PRE-MOCK SET 1 EXAMINATION-2024

MATHEMATICS

Time allowed: 2hours 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		

Turn Over

SECTION A (40 MARKS)

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

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

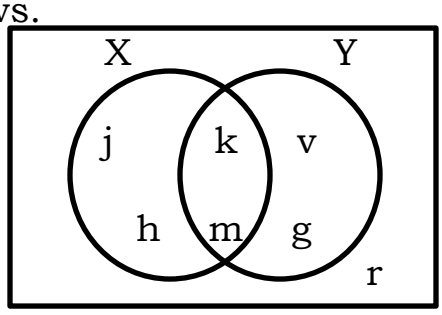
1- Workout:
$$\begin{array}{r} 2\ \ 3 \\ \times\ \ 4 \\ \hline \\ \hline \end{array}$$

2- Write 496 in roman numerals.

3- Given that m = $(5 \times 10^{0}) + (9 \times 10^{-2})$. Find the value of m.

4- Simplify: 5m – 3n + m – 2n

5- Study the venn diagram below and use it to answer the question that follows.

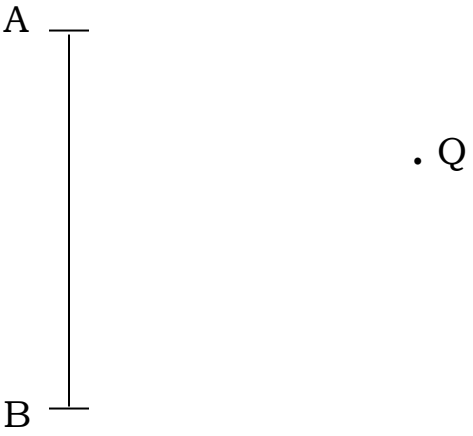


Find $n(Y)^{1}$

6- Workout: $1\ \frac{2}{3} \div \frac{5}{6}$

7- Find the Greatest Common Factor (GCF) of 12 and 18.

8- Using a pair of compasses, ruler and a pencil only, construct a perpendicular line through point Q.



9- Given that $c = b^2$ and $b = -4$. Evaluate; $3b - c$

10- The mean of 2, y + 1, 0 and 4 is 3. Find the value of y.

11- Solve: $2^k \div 8 = 1$

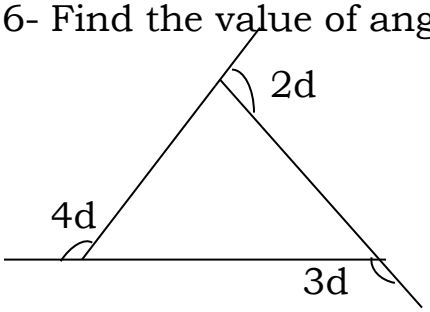
12- Given that  represents a dozen of balls. How many pictures will represent 42 balls?

13- Aminah had a bundle of fifty thousand shilling notes numbered consecutively from DC 2819238 to DC 2819282. How much money did he have altogether?

14- During a training, the probability that Messi will score penalty shots is $^4/_5$. If he missed 3 penalties, how many penalties did he score?

15- A motorist covered a certain distance using a speed of 80km/hr for 2 hours and 15minutes. Calculate the distance in kilometres the motorist covered.

16- Find the value of angle marked d in degrees.



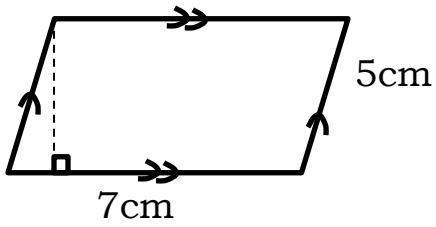
17- Convert 1 ½ litres into millilitres.

18- Use distributive property to work out:

(72 ÷ 4) + (28 ÷ 4)

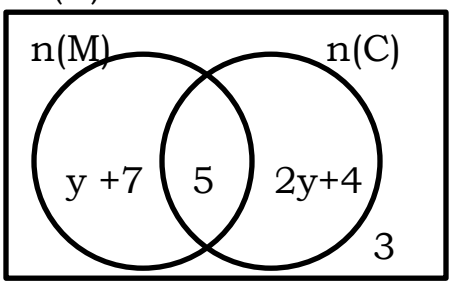
19- During a general election, Hakim stood in a line of people. He was in the 7^{th} position while counting from right and in the 11^{th} position while counting from left. How many people were standing in the line?

20- The area of the figure below is $28cm^2$. Find its height.



SECTION B (60MARKS)

21- The venn diagram below shows the number of pupils who like meat (M) and chicken (C). use it to answer the questions that follow.



(a) If 16 pupils like chicken only, find the value of y. ***(2marks)***

(b) How many pupils ate meat? ***(2marks)***

(c) If a pupil is picked at random, find the probability that the pupil picked do not like any of the two dishes. ***(2marks)***

22- (a) Workout: $2\ 1\ 1_{three}$ ***(2marks)***

$-\ 1\ 2_{three}$

(b) Change 21_{three} to a binary base ***(3marks)***

23- At a certain school, bells for upper primary and lower primary are rung at intervals of 40minutes and 30 minutes respectively.

(a) After how long will the two bells take to be rung at the same time?

(3marks)

(b) If the two bells were first rung together at 10:30am, at what time will they ring together again? ***(2marks)***

24- Kibalama went to the market with sh.40,000 and bought the following items;

Item	Quantity	Unit cost	Amount
Meat	_____kg	Sh.16,000	Sh. 20,000
Rice	2kg	Sh. 4,000	Sh. _____
Cooking oil	500ml	Sh. _____	Sh. _____
Total expenditure			Sh.30,500

(a) Complete the table above. ***(5marks)***

(b) Calculate his change. ***(1mark)***

25- (a) Workout: $\frac{1.2 + 2.4}{0.4 \times 0.9}$ ***(3marks)***

(b) Simplify: $\frac{1}{3} - \frac{7}{8} + \frac{3}{4}$ ***(2marks)***

26- The table below represents the marks scored by some pupils in a certain test. Use it to answer the questions that follow.

Marks scored	70	90	m	60
Number of pupils	2	1	3	4

(a) How many pupils did the test? ***(2marks)***

(b) If their average score was 71, which mark was scored by the 3 pupils shown in the table above? ***(3marks)***

27- Doreen is 4kg lighter than Tina. Sharifa is 2kg lighter than Doreen. The weight of Doreen and Sharifa is 54kg.

Find the weight of Doreen. ***(4marks)***

28- A trader bought 5 trays of eggs at sh. 12,000 each. He sold each tray at sh. 15,000.

(a) How much profit did the trader make? ***(3mrks)***

(b) Calculate his percentage profit. ***(2marks)***

29- Using a pair of compasses, ruler and a pencil only,

(a) Construct a triangle KLM such that line KL = 7cm, angle KLM = 105^0 and angle LKM = 30^0 ***(4marks)***

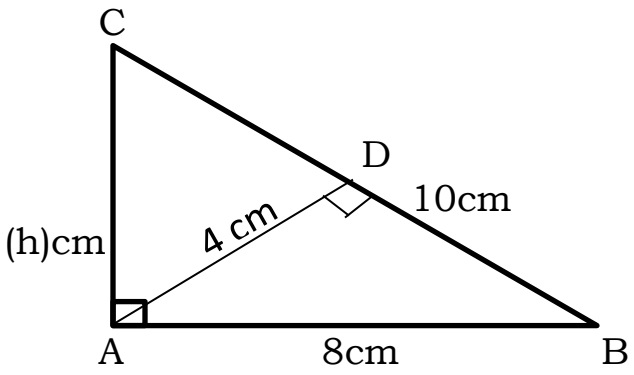
(b) Measure line LM = _____cm. ***(1mark)***

30- A business man sold a roll of a wire in the morning, afternoon and evening in the ratio of 2:5:3 respectively.

(a) If he sold 27metres of the wire in the evening, how long was the roll of the wire altogether? ***(3marks)***

(b) Calculate the length of the wire sold in the morning. ***(1mark)***

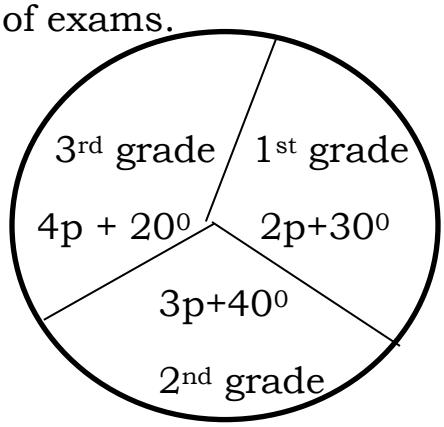
31- Study the figure below carefully and use it to answer questions that follow.



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

(b) Calculate the perimeter of the figure ABC ***(2marks)***

32- The pie chart below shows the grades obtained by some candidates in a certain set of exams.



(a) Find the value of p in degrees. ***(2marks)***

(b) If 27 candidates passed in first grade, how many candidates sat for the exams? ***(3marks)***

******GOOD LUCK******