



DIVINE EDUCATION CENTRE
PRE-REGISTRATION EXAMINATION
2025

MATHEMATICS SET 1

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.

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

1- Workout: $42 \div 3$

2- Write 46 in Roman numerals.

3- Simplify: $7p - 3b + 2p - 2b$

4- Find the next number in the sequence;

39, 38, 35, 30, 23, _____

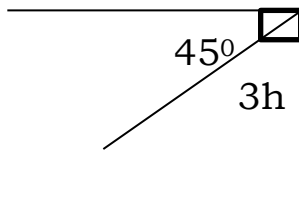
5- Given that $M = \{r, e, d\}$, write down all the subsets of set M.



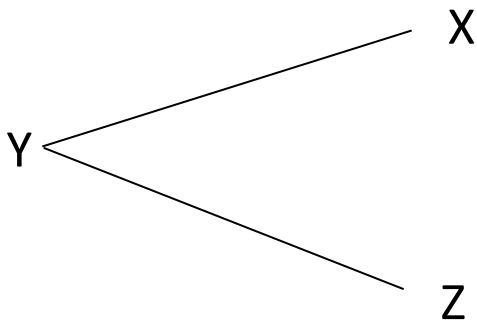
6- A driver left home at 9:20 a.m. and reached school after $3\frac{1}{3}$ hours. At what time did he reach school?

7- Round off 6989 to the nearest hundreds.

8- Find the value of h in the diagram below in degrees.



9- With the help of a protractor, measure the acute angle XYZ below.



10- Change $1\frac{1}{4}$ kg into grammes



11- Today is Thursday and we shall start writing our Mid-term exams after 19 days. What day of the week shall we start writing exams?

12- Solve for w; $\frac{w}{2} - 3 = 4$

13- Annet paid sh.3000 for 3 heaps of 6 oranges each heap. How much would she have paid if she was to buy 12 similar oranges?

14- Find the fraction equivalent to $\frac{2}{3}$

15- Given that $K = \{2_1, 2_2, 3_1, 3_2\}$ Find the value of K.



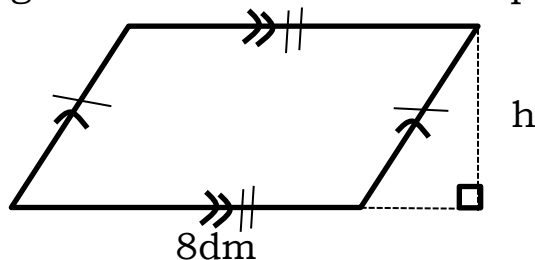
16- Given that $a = -2$ and $b = 4$. Find the value of $a^3 - b$

17- A box contains 15 eggs. Of these 8 are boiled and the rest are un-boiled eggs. Find the probability of selecting un-boiled eggs from the box at random.

18- Workout: $40 - 20 \div 5$

19- A motorist covered a certain distance at a speed of 90km/h for 36 minutes. Calculate the distance he covered in kilometres.

20- The figure below has area of 40sq.dm . Find its height. (h)



SECTION B (60MARKS)

Answer **all** the questions in this section.
Marks for each question are indicated in brackets.

21- (a) Workout: $0.04 + 40.4$

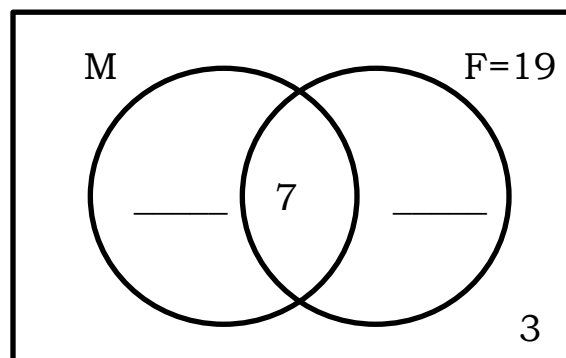
(02marks)

(b) Simplify: $\frac{0.07 + 0.11}{0.5 - 0.2}$

(03marks)

22- At a birthday party, 19 guests enjoy fanta (F), k guests enjoy mirinda only (M), 7 guests enjoy both mirinda and fanta while 3 guests enjoy neither of the two drinks.

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



(02marks)

- (b) If 25 guests took mirinda, how many guests took only one type of drink? **(03marks)**



23- The sum of three consecutive even numbers is 18. If the largest number is y ;

(a) Find the smallest number.

(03marks)

(b) Find their range.

(01mark)

24- Joan went for shopping with two notes of twenty thousand shillings and bought the following items;

- 2kg of rice of sh.3,400 per kg.
- 250g of salt at sh. 2,000 each kg.
- 1 $\frac{1}{2}$ kg of meat at sh. 15,000 each kg.

(a) Calculate her total expenditure.

(04marks)

(b) How much was her change?

(02marks)

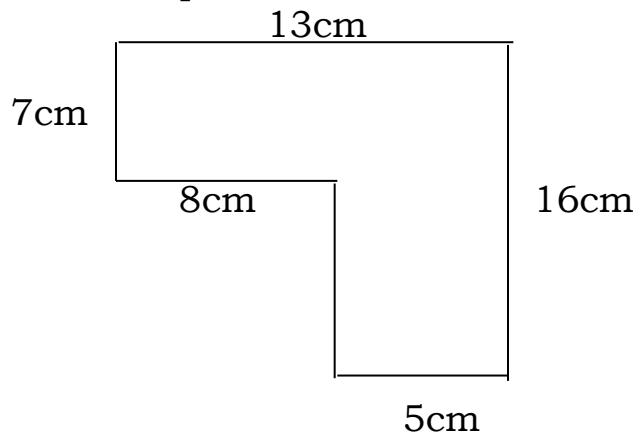


25- At a children's end of year party, the entry fee for adults and children was sh. 3000 and sh.5000 respectively. Mr. Kiggozi's family included himself, mother, grandmother and his 4 daughters.

If the eldest daughter was above 18years of age, how much did the family spend altogether?

(05marks)

26- The shape below was made of a wire



(a) Find the total length of the wire used to make the above shape.

(02marks)

(b) Find the area of the shape formed by the wire.

(03marks)



27- Hajjat got a loan of sh.500,000 from a money lender at a rate of 5% per month. After a certain period of time, she paid an amount of sh.575,000.
(a) Calculate the interest she paid at the end of the given time.

(02marks)

(b) For how long was the loan?

(03marks)

28- A mother is thrice as old as her daughter now. The difference in their age is 24.

(a) How old is the mother now?

(03marks)

(b) How old was the daughter when the mother celebrated her 29th birthday?

(03marks)



29- A bus left town P at 7:00am driving at a speed of 60km/h for 90 minutes to town Q. It rested at town Q for 30minutes and then continued to town R using a speed of 60km/h. If the bus reached town R at 10:00am.

(a) Calculate the distance it covered between town P and town Q.

(02marks)

(b) Calculate the average speed for the whole journey.

(02marks)

30- Arrange the following fractions in descending order.

$\frac{2}{3}$, $\frac{1}{2}$, $\frac{4}{5}$, and $\frac{1}{6}$

(05marks)



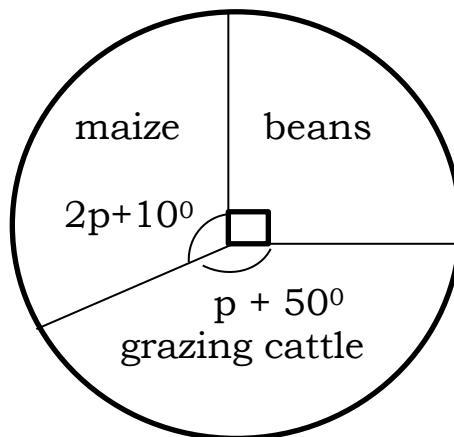
31- Using a pair of compasses and a ruler only,

- (a) Construct a triangle PQR where line PQ = 7cm, angle PQR = 45° and angle QPR = 60° **(04marks)**

(b) Measure line QR = _____ cm

(01mark)

32- Mr. Baguma uses his land as shown in the circle graph below.



(a) Find the value of p in degrees.

(02 marks)

(b) If he uses 4.5 acres of land for growing beans, calculate the size of his land.

(03marks)

END

