



DREAM AFRICA SCHOOLS

“Enabling Success”

PRIMARY SEVEN MOCK EXAMINATIONS 2024

PRE MOCK - SET 3

MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

Index No.

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

Pupil's Name:

Pupil's Signature:

School Random Name:

District Random Name:

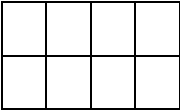
Read the following instructions carefully

1. This paper is made up of two sections: **A** and **B**.
Section **A** has 20 questions and Section **B** has 12 questions
2. All working for both Sections A and B must be shown in spaces provided
3. All working must be done using the blue or black ball-point pen ink or fountain pen. Any work done in pencil other than graphs and diagrams will not be marked.
4. No calculators are allowed in the examination room.
5. Unnecessary alterations and changes of work may lead to loss of marks.
6. Any handwriting that cannot easily be read may lead to loss of marks.
7. Do not fill anything in boxes indicated: "FOR EXAMINERS' USE ONLY" and those inside the paper

| FOR EXAMINER'S USE ONLY | | |
|-------------------------|-------|----------|
| Qn. No. | MARKS | INITIALS |
| 1-5 | | |
| 6-10 | | |
| 11-15 | | |
| 16-20 | | |
| 21-22 | | |
| 23-24 | | |
| 25-26 | | |
| 27-28 | | |
| 29-30 | | |
| 31-32 | | |

Turn Over

SECTION A

| | | | |
|----|--|-----|--|
| 1. | Add: $123_{\text{five}} + 14_{\text{five}}$ | 2. | Write 54046 in words |
| 3. | Workout: $(49 \times 9) - (19 \times 9)$ | 4. | Simplify: $-7 + -2$ |
| 5. | Round off 78549 to the nearest hundreds | 6. | Shade $\frac{3}{4}$ in the figure below.  |
| 7. | The LCM of two numbers is 36 and their GCF is 6, find the first number, if the second number is 12 | 8. | Write XLIX in Hindu-Arabic numerals |
| 9. | Which angle is a quarter of its supplement? | 10. | Change 0947hours to 12-hour clock system. |

| | | | |
|-----|---|-----|--|
| 11. | Solve: $3x^2 - 4 = 71$ | 12. | A man deposited shs150000 in a bank which offers an interest rate of 5% per annum. Find his interest after $\frac{1}{2}$ a year. |
| 13. | Workout: $2 - 6 \pmod{7}$ | 14. | What number has been expanded to $(8 \times 10^3) + (4 \times 10^1) + (3 \times 10^{-1})$ |
| 15. | If $m = 3$ and $n = -2$, find the value of $m^2 - n^3$. | 16. | Find the next number in the sequence. -11, -7, -3, ____ |
| 17. | The total surface area of a cube is 216cm^2 . Find the length of each side. | 18. | Workout: $1\frac{1}{2} - \frac{2}{3}$ |
| 19. | Sixty six trees are planted on a straight line at fixed intervals of 10metres. Find the length of the line. | 20. | 4 people can dig a garden in 5 days, how many more people are needed to complete the same garden in 2 days? |

SECTION B

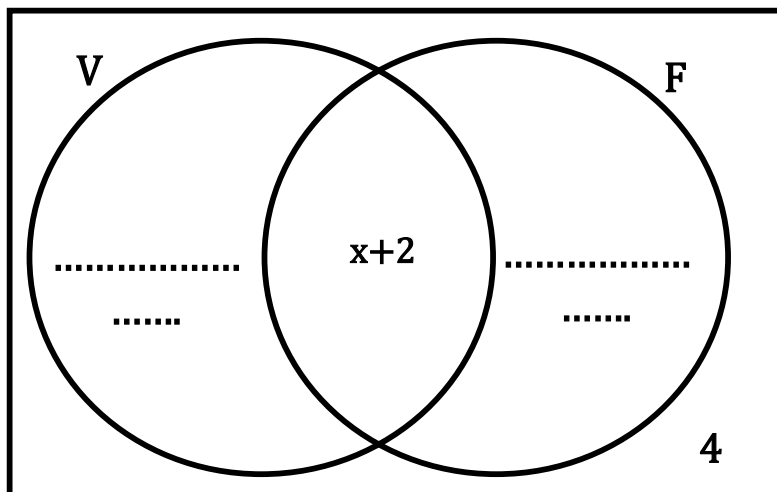
21. Peter covered $\frac{1}{3}$ of his journey in the morning, $\frac{1}{4}$ of the remainder in afternoon and the rest in evening

(a) What fraction did he cover in the evening? (3 marks)

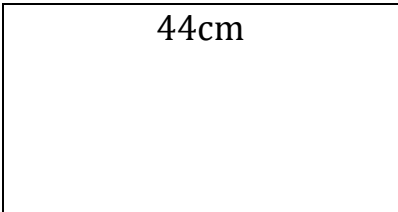
b) If he was left with 20km to cover, how long was his journey? (2marks)

22. In a class, $(2x+8)$ like volleyball (V) only, $(x+20)$ like football (F) only and $(x+2)$ like both while 4 pupil like none of the two games.

(a) Use the above information to complete the Venn diagram below. (2marks)



(2 marks)

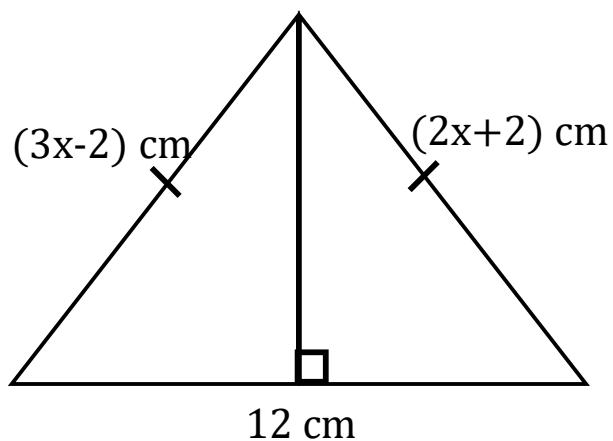
| | |
|-----|--|
| b) | Find the value of x if the those who like Volleyball are equal to those who like Football only. |
| | (2 marks) |
| 23 | Workout: $\frac{0.27 \times 0.08}{0.9 \times 0.06}$ (3marks) |
| b) | Find difference of $\frac{3}{4}$ and $\frac{1}{5}$ (2marks) |
| 24. | <p>Use the rectangle below to answer the questions that follow.</p> <div style="text-align: center;">  <p>20cm 44cm</p> </div> <p>a)If the rectangle is curved to form a circular tank, Calculate the radius of the tank.(3marks)</p> |

| | |
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| b) | b) Find the capacity of the tank. (3marks) |
| 25. | If tap A fills a tank in 3 minutes, tap B fills the same tank in 4minutes while tap C empty the tank in 2 minutes, if all the taps are left open at the same time, how long will they take to fill the tank?(3marks) |
| b) | If 20% of a number is 40, what is the number? (2marks) |
| 26. | A lorry moved from town P to town R at a speed of 90Km/hr for $1\frac{1}{3}$ hours and it continued to town S covering a distance of 60km at a speed of 30km/hr a) Find the total distance moved (2marks) |

| | |
|-----|---|
| b) | b) Calculate its average speed for whole journey (3marks) |
| 27. | a) The interior angle of a regular polygon is three times the angle of its exterior, Find the number of sides of the polygon (3marks) |
| b) | Find the interior angle sum of the polygon. (2marks) |
| 28 | a) Convert 223_{six} to denary base. (2marks) |

b) Solve for y: $23y = 11$. (2marks)

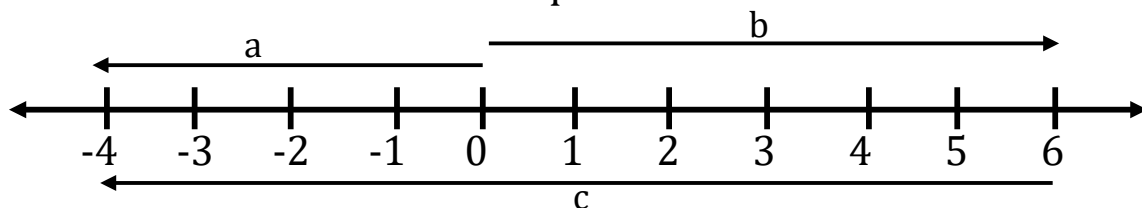
29 Study the Venn diagram below and answer the questions that follow



a) Find the value of x (2marks)

b) Calculate the area of the triangle (3marks)

30. Use a number below to answer questions that follow.

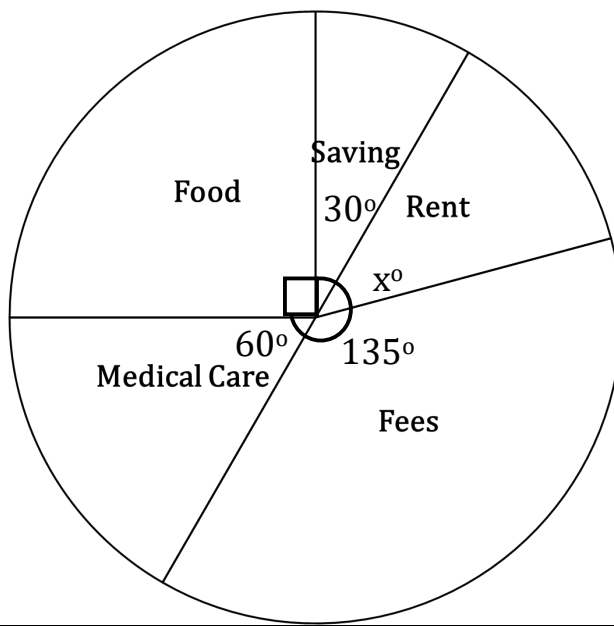


a) What integers are represented by: (3 marks)

a_____ b_____ c_____

| | |
|----|--|
| b) | Write the mathematical statement represented on the number line (2 marks) |
| 31 | With the help of a ruler, a sharp pencil and a pair of compasses only, construct figure ABCD where line AB is parallel CD and AD to BC, line AB is 7cm, angle BAD is 60° , angle ABC is 120° and line BC is 5cm.(5marks) |

32 The circular graph below shows how peace spends her monthly salary.



a) If she spends shs15000 on rent, find her salary. (3 marks)

b) How much did she spend on food than medical care? (2 marks)

END