KARLMARX EDUCATION SERIVCES

MOCK EXAMINATIONS 2023

PRIMARY SEVEN

MATHEMATICS

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.
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.

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Turn Over

SECTION A (40 MARKS)

1. Add: 54 + 46

2. Simplify: $^-3 - {^-4}$

3. If set Q has 64 subsets, Find n(Q)

4. Work out: $101_{two} - 11_{two}$

5. Find the complement of $(2y - 60)^0$

6. Solve the inequality: $\frac{1}{2}k - 2 \leq 3$

7. Convert CDXLIV in Hindu Arabic numerals.

8. Workout: $4 - 5 = x \pmod 7$

9. Write 640,093 in words.

10. Given that m = $^-2$, n = 3 and r = 4. Find the value of $\dfrac{n - m}{n}$

11. A 45 minute lesson started at 11:30am. At what time did it end?

12. The average weight of 6 girls is 30kg. When their teacher joins them the average weight becomes 36kg. Find the weight of the teacher.

13. Divide: $\frac{2}{3} \div \frac{1}{3}$

14. Jonathan had 30km still to cover after travelling $\frac{3}{5}$ of his journey. How far was the journey?

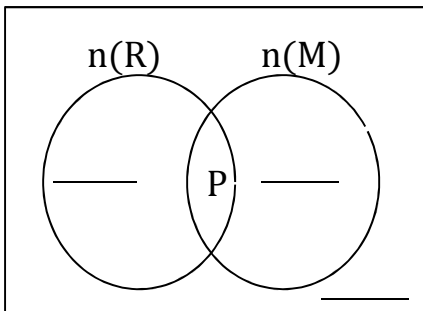| 15. What is 20% of the supplement of 60^0?	16. The ratio of boys to girls in a class is 2:3. If there are 45 girls, how many boys are in the class?
17. How many 0.25litre cups can fill a 15 litre Jerrycan of milk?	18. Change 0.8333……. to a vulgar fraction.
19. If $\frac{2}{3}$ of a number is 40. What is the number?	20. Find the next number in the Sequence below. 2, 3, 11, 38, ————

SECTION B (60 MARKS)

21. In a village, 32 farmers like growing rice (R), 7 like growing, maize (M) only, K like growing both crops and 5 hate both crops.

  a) Complete the Venn diagram below.   (3 marks)

  b) If 27 farmers like growing maize, how many farmers are in the villages?

(2 marks)

22. The sum of 3 consecutive even numbers is 24. If the middle number is W, Find their range.

(4 marks)

23. (a) If today is Saturday, What day of the week was it 105 days ago?

(2 marks)

b) Given that y=3x -1, Complete the table below.

X	1	___	0	___
Y	___	5	___	-4

24. a) Subtract: P + 2 from 2P – 5   (2 marks)

b) Solve for P: $4(4P – 2) – 4 (2P + 6) =16$ (3 marks).

25. Amos travelled at 40kph for 3hours. He rested for 1 hour and continued his journey at 90km per hour for 2 hours. Calculate Amos' average speed for the whole journey.

(4 marks)

26. George is 18years older than his sister Mary. In 10 year's time George will be twice as old as Mary.

a) How old is George now?

(3 marks)

b) How old will Mary be in 10 years' time?

(2 marks)

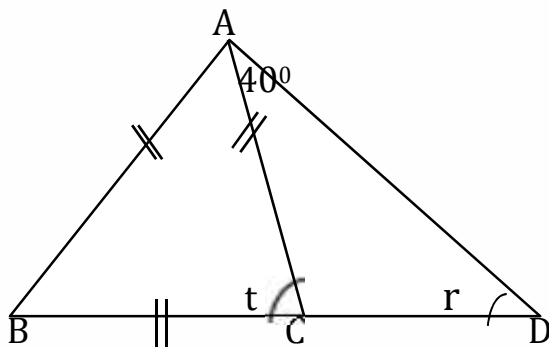27. The ratio of the interior angle to the exterior angle of a regular polygon is 7:2.
a) How many sides has the polygon

(3 marks)

b) Calculate the interior angle sum of the polygon.

(2 marks)

28. Study the figure below and answer the questions that follow.

a) Find the value of t

(2 marks)

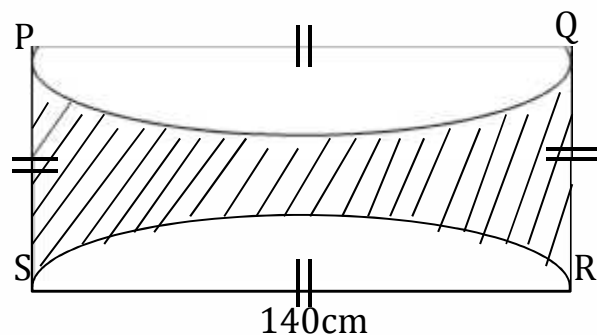b) Find the size of angle r

(2 marks)

29. (a) Workout: $\frac{3}{4} \div 1\frac{1}{4} \times \frac{5}{9}$

(2 marks)

(b) Simplify: $\frac{0.72 \times 1.2}{0.4 \times 0.9}$

(2 marks)

30. The figure below is made up of two semi circles. Study it carefully and find the area of the shaded part

31. There are 50 pupils in P.7. Twenty of them received 13 apples each while the rest got 11 apples each.
(a) How many apples were given out altogether?

(3 marks)

(b) If the cost of an apple is Sh. 1200, how many was spent to buy all apples?

(2 marks)

32. Peter Paul and Pauline shared some money in the ratio of 2:3:1 respectively.
(a) If both Peter and Pauline got Shs. 6,000 altogether. Find the total amount the three people shared.

(3 marks)

(b) Express Pauline's share as a percentage of the total share.

(1 mark)