THE MODERN TIMES EXAMINATIONS

PRIMARY SEVEN PRE-MOCK SET TWO

2025

MATHEMATICS

Time allowed: 2 hours 30 minutes

Random No.				Personal No.				

Candidate's Name:	
Candidate's Signature:	

Read the following instructions carefully:

- **1.**Do not write write your **School** and **district name** anywhere on this paper.
- 2. This paper has two sections: A and B Section A has 20 questions (40 marks) and Section B has
- 12 questions (60 marks) 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 **Examiner's use only** and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY			
QN. NO.	MARKS	EXR'S INITIALS	
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. Questions 1 to 20 carry two marks each.

2. Given that set $A = \{All \text{ factors of 9}\}$. Find the number of subsets in set A.

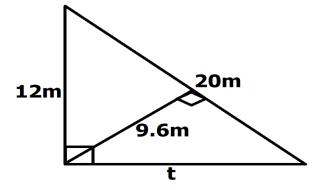
3. Find the next number in the sequence below

4. A car travelling at a speed of **20km/h** covers a journey in **4 hours**. How long will it take to cover a journey at a speed of **16km/h**?

5. Express $\frac{1}{27}$ in power form.



6. Find the value of **t** in the figure below.



7. Simplify: $2\frac{1}{2} \div \frac{1}{3}$

8. A minute hand moved from **7** and made an angle of **240**°. How many minutes did the minute hand make?

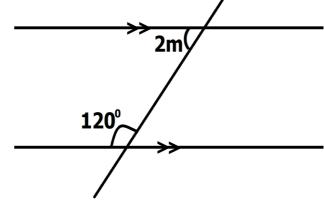
9. Workout: +4 + -6

10. Round off 46249 to the nearest hundreds.



11. Simplify: 2y + 9x - y - 10x

12. Find the value of \mathbf{m} in the figure below.







15. Solve:
$$2k + 3 = 11$$

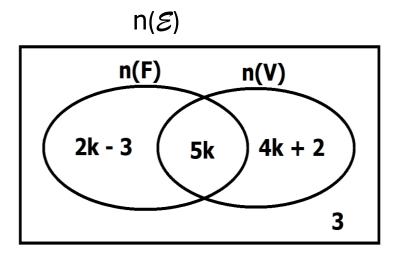
16. Using a ruler, a pencil and a pair of compasses only, construct an angle of **22.5**^o

17. Find the area of a circle whose circumference is 44cm. (Take $\pi=3\frac{1}{7}$)
18. Convert 34 _{ten} to base three.
19. A school football team will have a match with St Michael Primary School on Saturday. What is the probability that our school team will win the match?
20. Write 20.49 in words.

SECTION B: 60 MARKS

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

21. The Venn diagram below shows the number of pupils who play football (F), volley ball (V) and those who play other games in the school. Use it to answer questions that follow.



If the number of pupils who play only one game is **17**.

a) How many pupils play both games?

(3 marks)

b) Find the probability that the school's games prefect does not play volleyball at all. (3 marks)

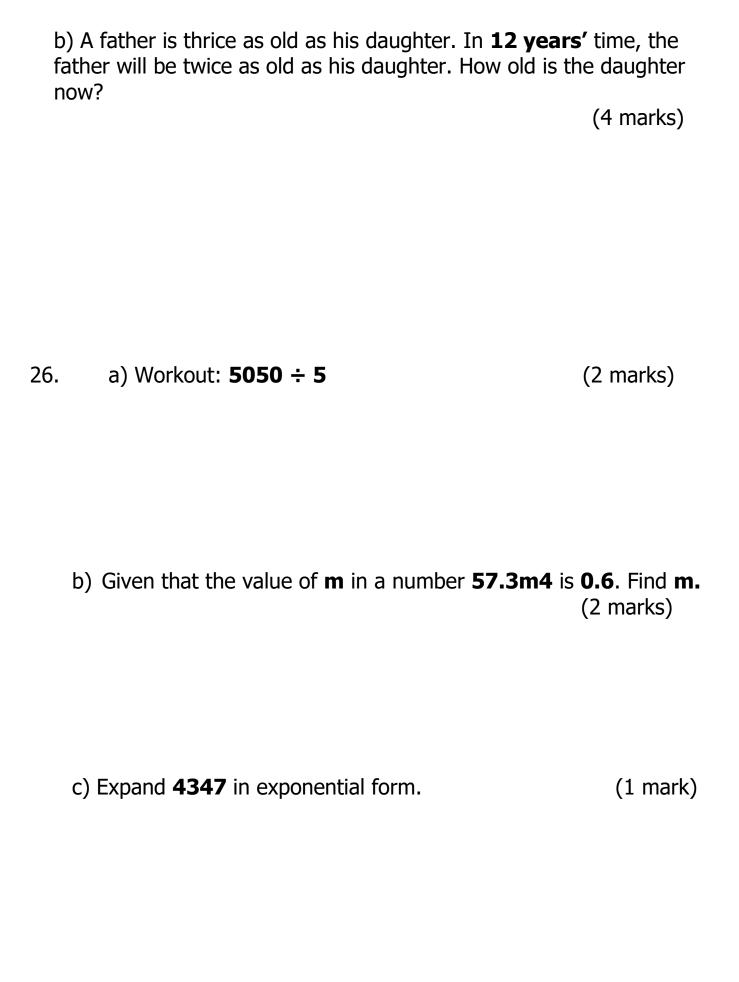
b) Juma sold a sack of **40kg** of salt using small packets of **0.25kg** each. Find the number of **0.25kg** packets he sold from the sack. (2 marks)

- 23. In a market, there are **40** traders who sale clothes, **48** traders sale cars and **32** traders sale food items. Each category is to form small groups of equal numbers to receive support from a certain NGO.
 - a) Find the maximum number of traders that will be in each group formed. (2 marks)

b) How many groups will be formed in each category of traders? (3 marks)

b) A motorist drove from town A to town B a distance of **60km** for $1\frac{1}{2}$ hours and rested for **30** minutes at town B. Through the same route, he drove back to town A at a speed of **30km/h**. Calculate his average speed for the whole journey. (3 marks)

25. a) Solve for p in $8 \ge 4p \ge -12$ and state the possible positive values of **p**. (2 marks)



27. The table below shows the marks scored by candidates in a premock test. Use it to answer the questions that follow.

Marks	60	70	80	50
Number of pupils	3	2	1	h - 2

a) Given that the mean mark is **60**. How many candidates did the test? (3 marks)

b) Workout the median mark of the scores.

(2 marks)

- 28. Using a ruler, sharp pencil and a pair of compasses only.
 - a) Construct a quadrilateral **PQRS** where sides **PQ** and **QR** are **7cm** and **5cm** respectively and angle **PQR** = **135**⁰ (3 marks)

- b) Drop a perpendicular bisector from **Q** to meet line **SR** at **Y** and measure length **QY**. (2 marks)
- 29. Mr Kakooza spends his monthly allowance on food, rent and transport in the ratio of **4:3:7** respectively. If he spends **sh. 30,000** more on transport than rent. Calculate his total monthly allowance. (4 marks)

29. a) Multiply: $202_{\text{three}} \times 23_{\text{three}}$ (2 marks)

c) Given that $203_k = 53_{ten}$. Find the base represented by **k**. (2 marks)

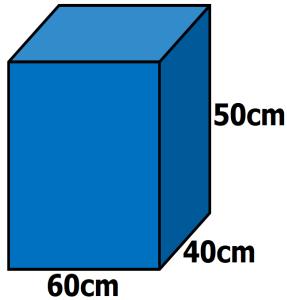
30. The table below shows the rates at which different currencies are sold and bought at KPS Forex bureau. Use it to answer the questions that follow.

Currency	Buying Rate	Selling Rate	
1 Euro (€)	Ugsh. 4000	Ugsh. 4020	
1 Kenya shilling (ksh)	Ugsh. 35	Ugsh. 36	
1 Us Dollar (\$)	Ugsh. 3600	Ugh. 3650	

a) A trader has **480 Euros**. How much in Uganda shillings does she have? (2 marks)

b) Jaria has **600 Us Dollars** and wants to travel to Kenya for a trip. How much will she get in Kenya shillings? (3 marks)

31. The figure below shows a water tank. Study it carefully and use it to answer the questions that follow.



a) Workout the capacity of the tank when completely full. (2 marks)
b) When the tank was full, $\frac{1}{5}$ of the water was used for home cleaning and $\frac{1}{2}$ of the the remaining water was used for irrigation. How many litres were used for irrigation? (3 marks)