



# KAMPALA CAPITAL CITY AUTHORITY

DIRECTORATE OF EDUCATION AND SOCIAL SERVICES

PRIMARY SEVEN MOCK EXAMINATION 2024

## MATHEMATICS

TIME ALLOWED: 2 HOURS 15 MINUTES

INDEX NO.	EMIS No.	Personal No.

CANDIDATE'S NAME: .....

CANDIDATE'S SIGNATURE: .....

EMIS No: .....

DIVISION NAME: .....

Read the following instructions carefully.

1. This paper is made up of two sections:  
**A and B**
2. Section **A** has 20 questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions in both sections **A** and **B**
5. ALL answers **MUST** be written in Blue or Black Ball - point pen or ink.
6. Un-necessary alteration of work may lead to loss of marks.
7. All diagrams **MUST** be drawn in pencil.
8. Any handwriting that cannot be easily read may lead to loss of marks.
9. Do **not** fill any thing in the boxes shown  
**"For Examiner's use only".**

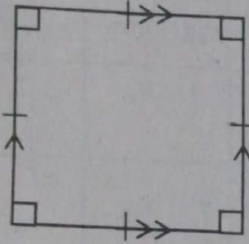
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### FOR EXAMINERS' USE ONLY

QN. NO.	MARKS	SIGN
1 - 6		
7 - 13		
14 - 20		
21 - 25		
26 - 29		
30 - 32		
TOTAL		

TURN OVER

**SECTION A (40 MARKS)**

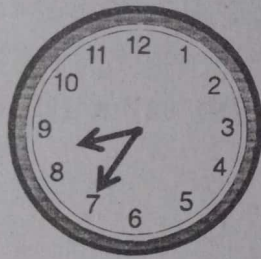
1. Workout:  $12 + 17$
2. Simplify:  $2y + y + 3y$
3. Express  $1101_{\text{two}}$  to base ten.
4. How many lines of folding symmetry has the figure below.  

5. Given that set  $Q$  has 8 subsets. Calculate the number of elements in set  $Q$ .
6. Work out the square root of 0.36.



7. What integer is five steps to the right of -3.

8. The mean of 9, 8, 6, 4 and  $x$  is 6, work out the value of  $x$ .

9. What morning time is shown on the clock face below?



10. Use distributive property to work out:  $(8.5 \times 6) + (8.5 \times 14)$

11. Find the next number in the sequence:

2, 3, 5, 7, \_\_\_\_\_

12. Using a ruler, pencil and a pair of compasses only construct an angle of  $60^\circ$  in the space below.
13. 62 poles were fixed along a straight road. The poles are fixed 5m apart. Work out the length of the road.
14. What number has been expanded to give  $(9 \times 10^2) + (7 \times 10^0) + (8 \times 10^{-1})$ .
15. Sh. 60,000 can buy only 5 books. How many similar books would Amos buy with sh. 108,000?



16. Work out the smallest number of oranges that when divided amongst either 5 boys or 6 girls leaves 5 oranges as the remainder.
17. Work out  $8 + 8 \div 8$
18. NOZU deposited sh. 72, 000 in post bank that gives interest rate of 10% per year for a period of  $1\frac{1}{2}$  years. Calculate the interest NOZU will get in her account.
19. Ademuni was facing North-East and turned clockwise  $135^\circ$ . Which direction is she facing now?

20. Round off 39.96 to the nearest tenths.

**SECTION B (60 MARKS)**

21. Some children in primary six class scored the following marks in a test: 42, 35, 28, 40, 35 and 60.

a) Work out the median mark.

(2 marks)

b) Calculate the mean score.

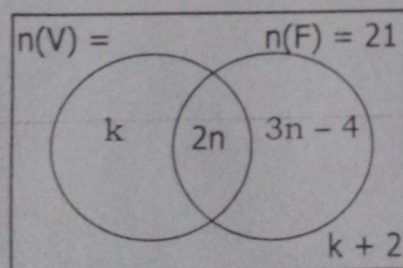
(2 marks)

c) Find the modal frequency.

(1 mark)

22. The Venn diagram represents a school team that went out for competition in Football (**F**) and Volleyball (**V**), Study it and answer the questions that follow.

$$n(E) =$$





a) Find the value of  $n$ . (2 marks)

b) If 14 players did not play Football (**F**), work out the value of  $k$ . (2 marks)

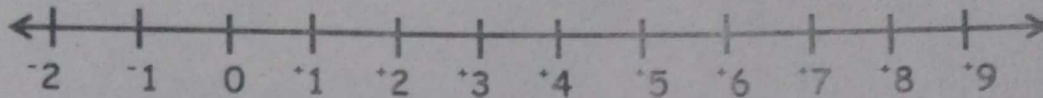
c) How many players went out for the competitions? (2 marks)

23. a) An assemble that lasted 45 minutes ended at 9:10am when did it start? (2 marks)

b) Express 0720hrs in 12hr clock system. (1 mark)

- c) A taxi moving at a speed of 120km per hour travelled for only 20 minutes.  
What distance did the taxi cover? (2 marks)

24. a) Show  $4 \times 2$  on the number line below. (2 marks)



- b) Find the solution set for the inequality:  $20 \geq 3p + 5 \geq 11$  (3 marks)

25. a) Express 94 in Roman numerals. (2 marks)

- b) Work out the product of the value of 2 and the place value of 7 in the number 8529.736. (3 marks)



26. A parent bought the items shown in the shopping bill below.

Work out and complete the bill.

(5 marks)

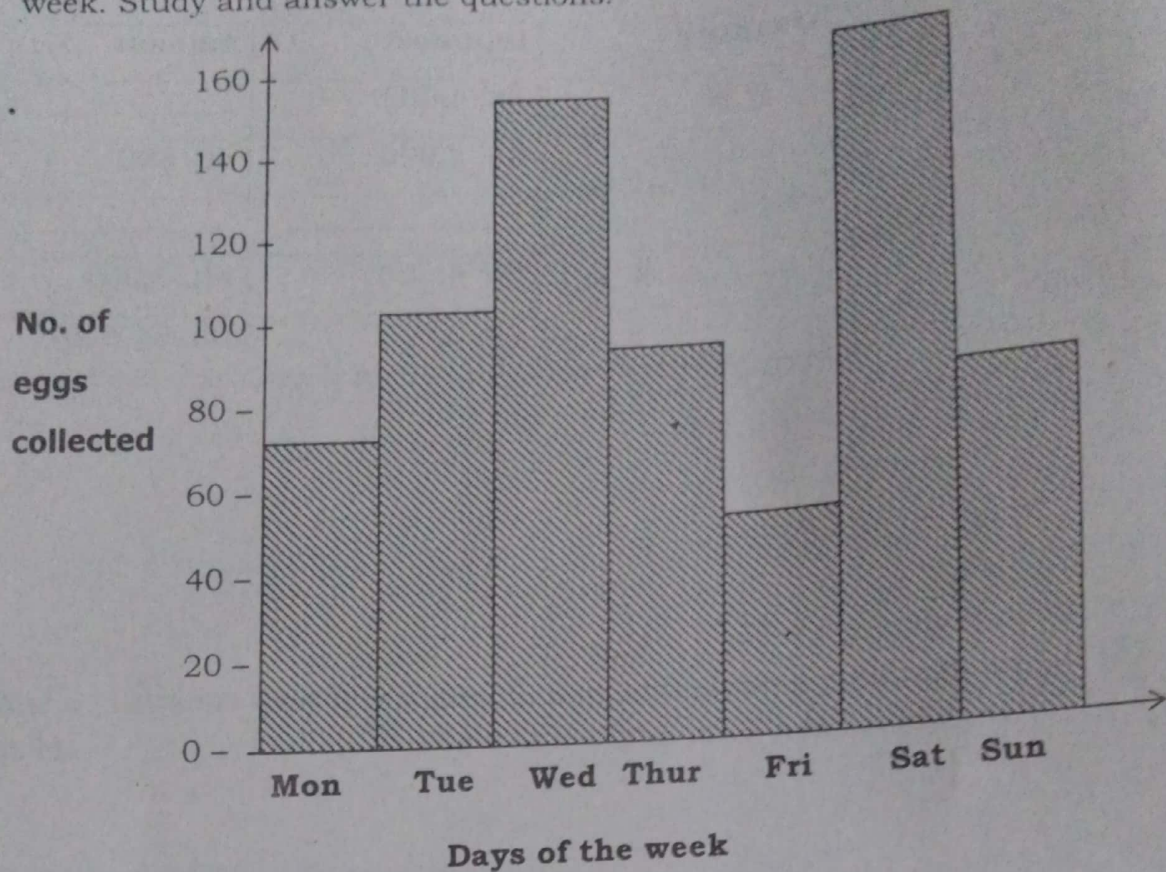
Item	Quantity	Unit cost	Amount
Sugar	1 $\frac{1}{2}$ kg	Sh. 4,000	_____
Milk	_____ litre	Sh. 2,000	Sh. 500
Meat	3kg	_____	_____
Rice	_____ g	Sh. 4,000	Sh. 3,000
Total			Sh. 54,500

27. a) Using a ruler, pencil and a pair of compasses only construct a triangle ABC where  $\overline{AB} = 6\text{cm}$ , angle  $ABC = 45^\circ$ ,  $\overline{BC} = 7\text{cm}$ . (4 marks)

- b) Measure angle BAC.

(1 mark)

28. The graph below shows the number of eggs collected in Jojo's poultry farm in a week. Study and answer the questions.



- a) How many eggs were collected on Thursday? (1 mark)
- b) Which day had the highest fall in the number of eggs collected? (1 mark)
- c) Work out the average of the number of eggs collected in the last four days. (3 marks)



29. a) The median of five consecutive odd numbers is 27. If the first number is  $k$ , work out the value of  $k$ . (2 marks)

b) The temperature at night fell from  $5^{\circ}\text{C}$  to  $-25^{\circ}\text{C}$ . Calculate the temperature fall. (2 marks)

30. Jesca, Jacinta and Joan shared some books in such a way that Jesca got 9 books. Jacinta got 6 books and Joan got 40% of the total books shared. (3 marks)

a) What percentage of books did Jacinta get?

b) How many books did they share altogether?

(3 marks)

31. A tank is  $\frac{4}{5}$  full of water, when 500 litres of water is drawn, the tank becomes  $\frac{2}{3}$  full of water. Calculate the capacity of the tank when full of water. (4 marks)

32. A motorist travelled from town **P** to **Q** at a speed of 70km per hour. On the return journey, the motorist travelled at a speed of 50km per hour. The total time taken for the whole journey is 6 hours. (3 marks)

a) Find the distance from town **P** to **Q**.

b) Calculate the time taken on the return journey. (2 marks)

END