

KAMPALA PRIMARY SCHOOLS' SKYLINE EXAMINATIONS™

P.L.E Preparation – 2024

Set 02

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.

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Candidate's Name:.....

Candidate's Signature:.....

School Name:.....

District Name:.....

DO NOT OPEN THIS BOOK LET UNTIL YOU ARE TOLD TO DO SO.

FOR
EXAMINERS'
USE ONLY

Read the following instructions carefully;

1. The paper has **two** Sections: **A** and **B**.
2. Section **A** has 20 short questions (40 marks).
3. Section **B** has 2 questions (60 marks).
4. Attempt **ALL** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using blue or black ball-point pen or ink. Only diagrams and graphs work may be done in pencil.
6. Unnecessary alteration of work will lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for examiners' use only.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARK	SIGN
1 – 4		
5 – 8		
9 – 12		
13 – 16		
17 – 20		
21 – 23		
24 – 26		
27 – 29		
30 – 32		
TOTAL		

SECTION A: 40 MARKS

Questions 1 to 20 carry two marks each.

1. Divide 108 by 3.

2. Express 1cm represents 8 metres in ratio scale form.

3. Donozio faces North West and turns in an anti-clockwise direction to face North East. Find the size of the angle he has turned through.

4. Find the sum of $1\frac{1}{2}$ and $2\frac{1}{4}$.

5. (i) Re-arrange the digits of 85649 to make the largest number possible:

(ii) What is the value of 8 in the number you re-organised in power form?

6. Work out the following:

(a) Weeks Days

$$\begin{array}{r} 8 \quad 2 \\ - 3 \quad 6 \\ \hline \end{array}$$

(b) Hours Min.

$$\begin{array}{r} 5 \quad 46 \\ + 4 \quad 34 \\ \hline \end{array}$$

7. Subtract "forty nine thousand forty nine" from half a million.

8. Write 8701.6 in scientific Notation.

9. (a) Write the property of numbers given below:

(i) $a \times b = b \times a$

(b) Use digits 2, 3 and 8 to show the associative property of addition.

10. Given that $K = -4$ and $P = -2$, find the value of $K - P^2$.

11. Jacinta sells her pens in grosses, dozens and singles. If she sold 1360 pens on Friday. Find the number of grosses, dozens and single pens she sold that day.

12. A school has a population of 2045 pupils. If the number of boys is 1465, how many more boys than girls are there in that school?

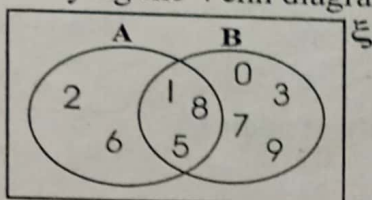
13. With the help of a ruler, pencil and pair of compasses only, construct an angle of 105° .

14. Add XCii to CViii

15. Round off $7 - 1.4021$ to the nearest hundredth.

16. How many litres of milk can be obtained from a rectangular tank 120cm by 90cm by 80cm?

17. Studying the Venn diagram below, how many subsets are in the complement of B?

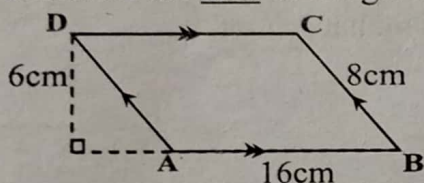


18. Write the solution set for: $-2 < X < 3$

19. What is the missing number in the sequence:

64, 16, 4, 1, _____

20. Calculate the area of the given figure ABCD below.



SECTION B: 60 MARKS

21. (a) Work out: $\frac{35 \times (420 - 180)}{15 \times 16}$ (2 marks)

- (b) Muwanga collected Shs.88,540/= after selling all the books he had at a fee of Shs.380/= per book. What number of books did he have? (2 marks)

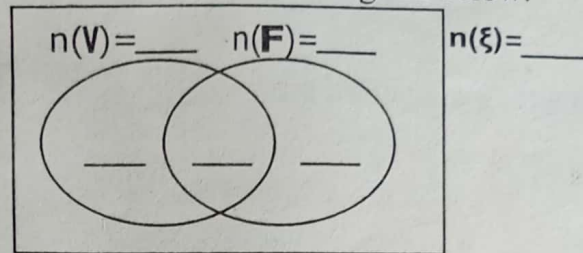
22. (a) It took 50 days to process tea leaves in a factory. In a day, the factory processes 2,500Kg of tea leaves. If the processed tea leaves are packed into 50Kg bags, how many bags were filled? (3 marks)

- (b) How long will the minute hand of a clock face take to turn through an angle of 120° ? (2 marks)

23. In a class of 40 pupils, 20 pupils like Football $n(F)$, 25 pupils like Volleyball $n(V)$, 8 pupils like both games and X pupils like none of the given games.

- (a) Represent the above information on the Venn diagram below.

(3 marks = $\frac{1}{2}$ mark each)



- (b) How many pupils like neither of the given games?

(2 marks)

- (c) Find those pupils who dislike volleyball?

(2 marks)

24. (a) Work out the sum of money which will amount to Shs. 120,000/= after a period of 4 years at the rate of interest of 5% per annum.

(3 marks)

- (b) Atenyi buys mangoes for Shs. 2,300/=. At what price should he sell each mango in order to make a gain of 20%?

(2 marks)

25. With the help of a ruler, a pencil and a pair of compasses *only*, construct the following figures:
(a) a square **ABCD** of radius 3cm. (3 marks)

(b) an equilateral triangle of diameter 5cm. (3 marks)

26. At Ndese Public Primary School, morning lessons start at 8:15a.m. Then 4 lessons of Two thirds of an hour each, then break time of 20 minutes and then 3 lessons of 30 minutes each. At what time does the morning session end? (4 marks)

27. (a) Find the value of **n**: $2^n \times 4 = 32$ (2 marks) (b) Simplify: $\frac{2a^3 \times 3a^4}{6a^5}$ (2 marks)

28. The table below represents marks scored by P.7 pupils in a weekly maths exercise. Use it to answer the questions that follow.

Frequency	3	6	3	1	4	3
Marks scored	17	11	7	23	13	9

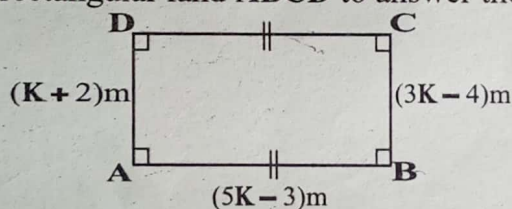
(a) What is the modal frequency?

(1 mark)

(b) Calculate the mean mark. (2 marks)

(c) Find the median score. (2 marks)

29. Use the diagram of a rectangular land **ABCD** to answer the questions that follow.



(a) Find the value of **K**.

(2 marks)

(b) What is the length of **BD**? (3 marks)

(c) Work out the distance around figure **ABD**. (3 marks)

30. A number is chosen at random from the set of integers 2, 3, 4, 5 – 10.

- | | |
|---|---|
| (a) What is the probability that it is a divisor of both 36 and 48? (2 marks) | (b) Find the chance that its square is a divisor of 2 or 3. (2 marks) |
|---|---|

31. Three men Jumba, Dunia and Mukuwa contributed money to start a business venture. Jumba raised Shs.8,800,000/=. Dunia contributed half as much as Jumba and Mukuwa gave thrice the contribution of Dunia. How much money did the three people raise altogether to start a joint business? (4 marks)

32. Study the diagram below and find the size of angles X, Y and Z. (2 marks each)

