

KAMPALA PRIMARY SCHOOLS'

SKYLINE EXAMINATIONS™

P.L.E Preparation – 2024

Set 03

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 12 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 | | |

Turn Over

SECTION A: 40 MARKS

Questions 1 to 20 carry two marks each.

1. Multiply 18 by 6.

2. Express "one ten thousandth" in figures.

3. Given that Set $E = \{\text{Polygons}\}$, Set $Q = \{\text{Quadrilaterals}\}$ and Set $P = \{\text{Parallelogram}\}$
Represent the given information on a Venn diagram.

4. The cost of 9 books is Shs.10,800/=.
What is the cost of 2 simialr books?

5. Simplify: $9xy - 5xy + 4xy - 2xy$

6. Write the given sets of numbers in descending form:
504347628, 504647628, 504547628, 504447628

7. Express 120cm as a ratio of 3 metres.

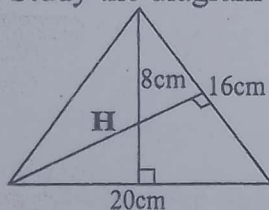
8. Work out: $\frac{1}{2} \times \frac{4}{5} - \frac{2}{3}$

9. 4 men can paint a building in 8 hours. How much less time can 6 men take to paint the same building while working at the same rate?

10. Shs.24,000/= is given to two boys to divide in the ratio 5:3. Find the amount of the largest share.

11. Three quarter of the pupils in the P.7 class like Mathematics. If 36 pupils like Mathematics, how many pupils are in the P.7 class.

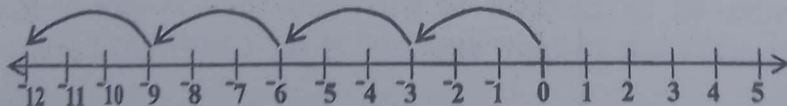
12. Study the diagram below and find the value of H.



13. Express 30Km/hr as metres per second.

14. Write the common factors of 24 and 36.

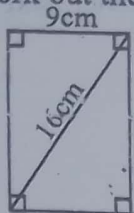
15. Write the mathematical statement for the given number line below:



16. (a) A bus left Kampala bus terminal at 0045hours. What time is it in 12hour clock system?

(b) Mukazi turned through an angle of 225° clockwise to face South East. What was her original direction?

17. Work out the area of the quadrilateral given below:



18. Masembe walked 3Km in 45 minutes and 2Km in 25 minutes. What is his average speed in Kilometres per hour?

19. Solve in base five: $2K - 4 = 11$

20. The price of a shirt was reduced by 20% to Shs.20,000/=. What was the price of the shirt before reduction?

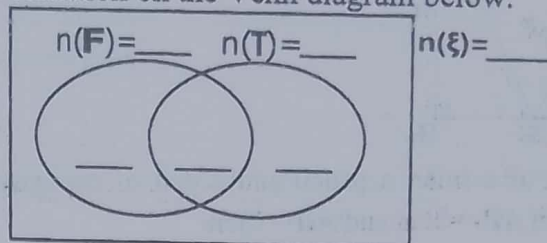
SECTION B: 60 MARKS

21. (a) Write 0.7, 3.6, 0.07, 1.7 and 0.36 in ascending order. (2 marks)

- (b) Express 0.727272... as a common fraction in its simplest form. (2 marks)

22. Mudubira gets an allowance of Shs.63,000/= for 7 days. By how much percent must he reduce his daily expenditure if his allowance must now last 10 days? (3 marks)

23. In a club, $K+20$ members like Football only $n(F)$, $K+10$ members dislike either of the games, $3K+10$ members like Tennis $n(T)$ but not Football and $2K$ members like both games.
- (a) Represent the above information on the Venn diagram below. (3 marks = $\frac{1}{2}$ mark each)



- (b) If 28 members dislike Football, what is the value of K ? (2 marks)

- (c) How many members like only one game? (2 marks)

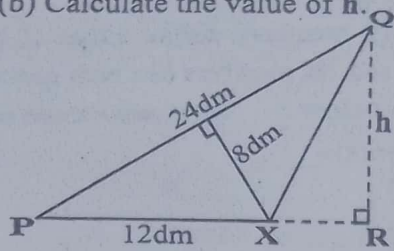
24. (a) Two numbers have their Lowest Common Multiple as 72 and their HCF is 6. One of those numbers is 18. Find the second number. (2 marks)

- (b) Three bells for lower, middle and upper classes ring at the same time when lessons begin. Then they ring at intervals of 24 minutes, 30 minutes and 48 minutes respectively. After how long will they ring again at the same time? (2 marks)

25. (a) A square has the same perimeter as a rectangle whose width is 3cm. Find the area of the rectangle if the distance around the square is 24cm. (3 marks)

(b) Calculate the value of h .

(2 marks)



26. (a) With the help of a ruler, a pencil and a pair of compasses *only*, construct a rectangle ABCD in which $AB = 6\text{cm}$ and $AD = 3\text{cm}$. (4 marks)

(b) Find the length of AC.

(2 marks)

(c) Calculate the area of the figure ADC. (2 marks)

27. (a) Find the value of P: $5(P + 1) - 3(P - 1) = 14$

(3 marks)

(b) A mother is 4 times as old as her daughter Shania. The difference between their ages is 36 years. How old is each of them? (3 marks)

28. The table below represents marks obtained by P.6 pupils in a Mathematics test. Use it to answer the questions that follow.

| | | | | |
|--------------|----|----|----|----|
| Frequency | 3 | 2 | 1 | 4 |
| Marks scored | 70 | 40 | 30 | 60 |

- (a) How many candidates are in P.6?

(2 marks)

- (b) Calculate the mean mark.

(2 marks)

- (c) What is the median mark?

(2 marks)

29. (a) Work out:

(3 marks)

$$\begin{array}{r} 2211_{\text{four}} \\ + 1122_{\text{three}} \\ \hline \end{array}$$

five

- (b) Given that $24_K = 202_{\text{three}}$. Find the value of K.

(2 marks)

30. Kigere takes 3 hours to cover a certain distance when his average speed is 60Km/hr.

- (a) What is the distance that he covered?

(2 marks)

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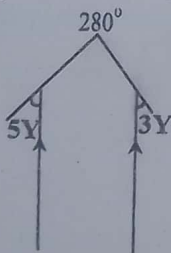
- (a) What is the distance that he covered?

(2 marks)

(b) How long would it take him to cover the same journey at an average speed of 40Km/hr? (2 marks)

31. Mr. Mubarak distributed cows to his children as follows: Keno got 3,000 cows, Zahara received 2,400 animals, Musa was given 2,200 cows and Gala got 1,400 heads of cattle. Using a diameter of 8cm, draw an accurate pie-chart to represent the above information. (4 marks)

32. (a) Find the value of Y in the diagram given below. (2 marks)



(b) Find the size of angle N. (2 marks)

