



THE REPUBLIC OF UGANDA

KOIMA CITY PRIMARY SCHOOLS ACADEMIC BOARD

PRE-PRIMARY LEAVING EXAMINATION, 2022

PRIMARY SEVEN

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random Number						Personal Number		

Candidate's Name:

Candidate's Signature.....

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
Read the following instructions carefully:

1. Do not write your school or district name anywhere on this paper.
2. Section A, has 20 short-answer questions (40 marks) and Section B has 12 questions (60 marks)
3. 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 fountain pen. Only diagrams should be done in pencil.

No calculators are allowed in the examination room.

Unnecessary alteration of work may lead to loss of marks.

Any handwriting that cannot easily be read may lead to loss of marks.

Do not fill anything in the boxes indicated "For examiners' use only"

FOR EXAMINER'S USE ONLY		
Qn. No.	Marks	Exrs' No.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A: (40 Marks)

Answer all questions in section A and each number carries 2 marks.

1. Workout: $493 + 17$.
2. Given that set K = {L, m, n}.
List all the subsets in set K.
3. Write 240,319 in words.
4. Find the number which has been expanded below.
 $(3 \times 10^3) + (8 \times 10^1) + (5 \times 10^{-1})$.
5. Solve the equation: $3 + 6k = 21$.
7. It is Thursday today. The candidates will start their final exams 33 days from today. What day of the week will they start their final exams?
8. Using a pair of compasses, a ruler and a pencil only, Construct an angle of 60° in the space below.
9. Subtract $3x - 1$ from $5x - 4$.
10. If  represents 4 apples, draw pictures to represent 28 apples.
- Peter bought a shirt at sh.37,500 and later sold it making a profit of sh.6,500. Calculate his selling price of the shirt.
11. Find the square of the next number in the series below.
32, 21, 14, 9, 6, _____.

SECTION A: (40 Marks)

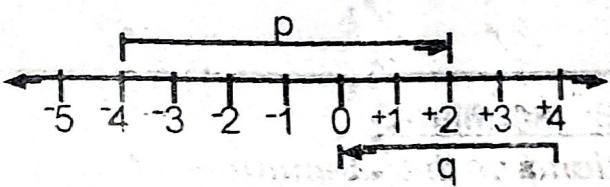
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Peter bought a shirt at sh.37,500 and later sold it making a profit of sh.6,500. Calculate his selling price of the shirt.

12. Write the integers represented by the letters p and q on the number line below.



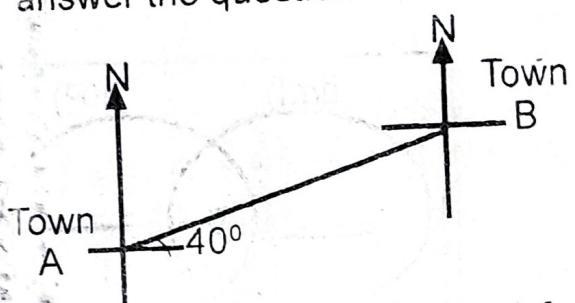
- (i) p _____
(ii) q _____

13. A farmer went to the garden at 9:45am and worked till 1:15pm. For how long did he work in the garden?

14. Convert $16\frac{2}{3}\%$ to fraction in its lowest term.

15. In a basket of 20 apples, 8 are red, 7 are grey and the rest are green. If a boy picked an apple at random from the basket, Find the probability that he picked a green apple.

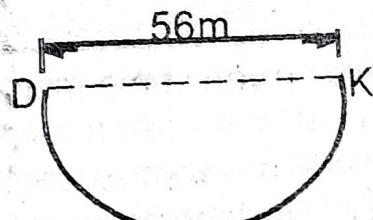
16. The area of a rectangular piece of land is 6300m^2 . Given that its length measures 90m, find the distance round the land.



What is the bearing of town A from town B?

18. Write 0.0687 in scientific form.

19. Find the length of the arc DK in the diagram below (use $\pi = \frac{22}{7}$).



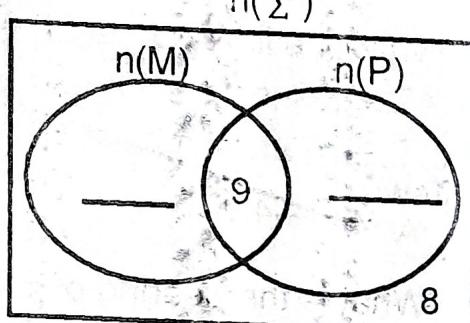
20. A house can be built by 4 men in 25 days. How many more men working at the same rate are needed to build the same house in 10days?

SECTION B: (60 Marks)

Answer ALL questions in this Section.

Marks for each question are indicated in the brackets.

21. At a birthday party, $(3y-1)$ pupils drank Mirinda (M) only, $(4y-6)$ pupils drank Pepsi (P) only, 9 pupils drank all the two types and 8 pupils drank none of the two.
- (a) Use the information above to complete the venn diagram below. (2marks)



- (b) If those who drank only one type of drink were 35, Find the value of y. (2marks)

- (c) How many pupils attended the party? (1mark)
- (d) Find the probability of picking a pupil at random who drank pepsi. (1mark)

- 22.(a) Change 123_{five} to base ten. (2marks)

- (b) Solve $213_{\text{six}} = 100_n$. (3marks)

23. Betty was given some money as pocket money to buy things to take to school and she bought the following.
 $3\frac{1}{2}$ dozens of exercise books at sh.6000 per dozen.
 4 bars of washing soap at sh.7500 each bar.
 3 tablets of bathing soap at sh. 6000 a tablet.
 2 tubes of toothpaste at sh.8000 per tube.
 5 Knickers at sh.7500.

(a) How much money did she spend altogether?

(5marks)

(b) If she was given a change of sh.7500 after buying all the items, how much was she given at first? (1mark)

24.(a) Solve the inequality: $7 - 2x \geq 11$. (2marks)

(b) Find the solution set for the inequality above. (2marks)

25. In a school farm, there are 240 cows and 190 bulls.

The farm manager treated $\frac{3}{4}$ of the cows and $\frac{2}{5}$ of the bulls.
How many animals were not treated? (5marks)

26. The table below shows marks scored by pupils in an SST Exams.

Number of pupils	4	6	3	2
Marks	80	M	45	50

(a) How many pupils did the test?

(1mark)

(b) Find the value of M if the mean mark was 61.

(3marks)

(c) Find the range of the marks. (1mark)

27. (a) Using a ruler, a pencil and a pair of compasses only, construct a triangle XYZ where $\overline{XY} = 7\text{cm}$, angle $ZXY = 120^\circ$ and angle $XYZ = 30^\circ$. Drop a perpendicular line from point Z to meet line XY at P. (4marks)

(b) Measure :- (i) \overline{XZ} _____ (1mark)

(ii) \overline{ZP} _____ (1mark)

28.(a) Workout: $\frac{0.45 \times 0.48}{0.96 \times 0.09}$

(3marks)

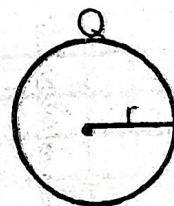
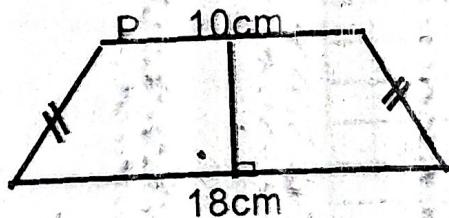
(b) Express $0.\overline{24}$ as a fraction in its simplest form. (2marks)

29. The table below shows the departure time and arrival time for a Link bus that travels from Hoima to Kampala daily.

TOWN	ARRIVAL TIME	DEPARTURE TIME
HOIMA		9:30am
KIBOGA	10:30am	10:55am
BUKOMERO	11:25am	11:40a.m
BUSUNJU	12:40p.m	1:00p.m
KAMPALA	1:30p.m	

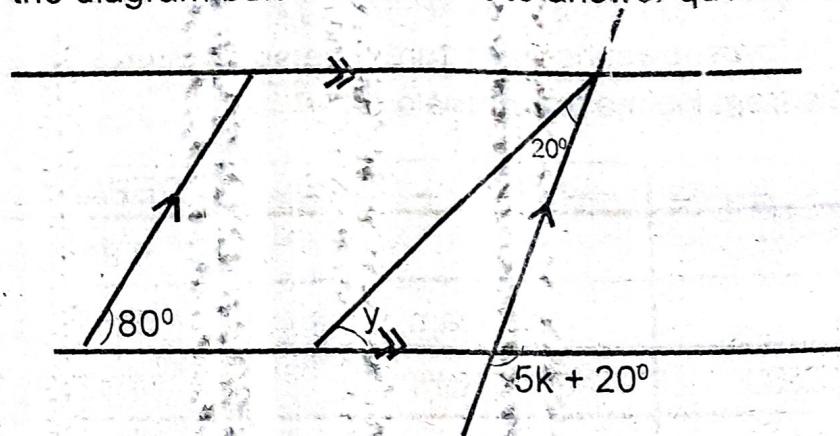
- (a) At what time does the Link bus leave Hoima? (1mark)
- (b) How long does the bus take to travel from Kiboga to Busunju? (1mark)
- (c) If the distance from Hoima to Kampala is 320km, calculate the average speed of the bus for the whole journey. (3marks)

30. The two figures below P and Q has the same area.



Calculate the value of length r in figure Q. (4marks)

31. Study the diagram below and use it to answer questions that follow.



Find the size of angles marked y and k in degrees.

(2marks each)

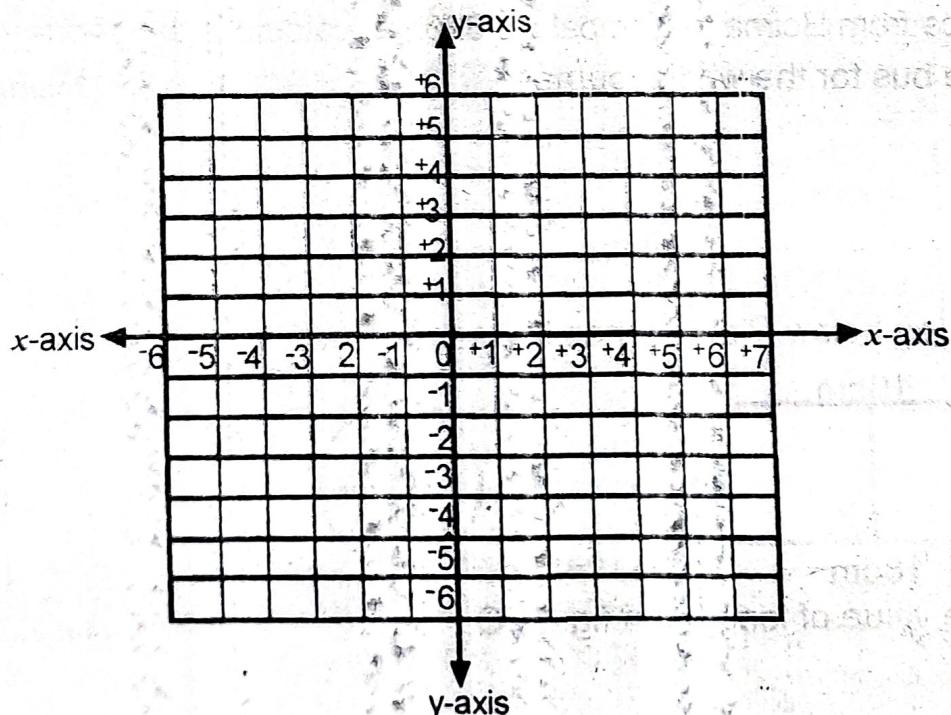
(a) k .

(b) y .

32. (a) Use the graph below to plot the following point.

(4marks)

P (-6, 0), Q (0, -3), R (-4, 0), S (0, -3)



(b) Join the points P to Q, Q to R, R to S and S to P.

(1mark)

(c) Name the polygon formed.

(1mark)