THE JUBRA EDUCATIONAL CONSULTS - KAMPALA

PRE-P.L.E SPECIAL SET 2024

SUBJECT : **MATHEMATICS**

CLASS : **PRIMARY SEVEN**

DURATION : **2 HOURS 30 MINUTES**

Index No.	Random No.						Personal No.		

CANDIDATE'S NAME : .....

CANDIDATE'S SIGNATURE : .....

SCHOOL NAME : .....

District Name :

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper is made up of two sections **A** and **B**.
2. Section **A** has **40** questions **(40 marks)**
3. Section **B** has **15** questions **(60 marks)**
4. Answer **ALL** questions. **All** answers to both section **A** and **B** must be written in the spaces provided.
5. All answers must be written using a blue or black ball-point pen or ink.
6. Unnecessary alteration of work may 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 Examiner's use only

FOR EXAMINERS' USE ONLY

PAGES	MARKS	SIGN
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TOTAL		

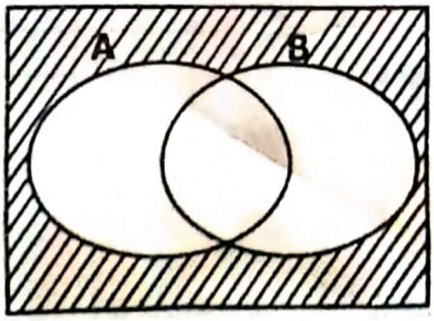
SECTION A: (40 MARKS)

1. Workout: 75-12

2. Write 102,042 in words.

3. Change 0.94 litres to cm^3.

4. Describe the shaded region in the Venn diagram.



5. Solve for r: $2r - 7 = 11$

6. Workout:

$$\begin{array}{r} 2\ 1\ 2_{five} \\ -\quad 4\ 2_{five} \\ \hline \\ \hline \end{array}$$

7. Using a ruler, a pencil and a pair of compasses only, construct the complement of 60^0.

8. What number has been expanded to get $(6 \times 10^{3}) + (5 \times 10^{-2})$?

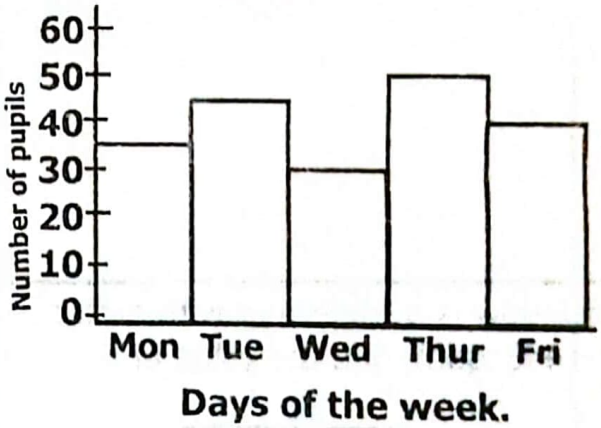
9. Mukasa slept at 9:55pm and woke up at 11:15p.m. For how long was he asleep?

10. A man had 18 banknotes numbered consecutively. What is the serial number of the first note if the last note's serial number was BX0436731?

11. Subtract 3a-8 from 15-6a

12. Collect like terms and simplify:
8m + 7n - 3m + 9n

13. The graph below shows the number of pupils who were absent in a class of 50 pupils during a period of one week in Lerico Junior School.

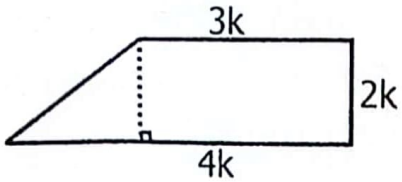


Workout the average attendance for the week.

14. A car moves at a speed of 20m/s. Express the speed in km/h.

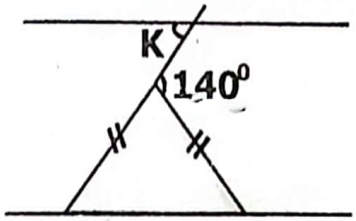
15. Joseph bought 3kg of rice at sh. 8000 per half kg. Find his total cost.

16. Below is a trapezium with area of 448sqdm, find the value of k.



17. In a town of 105 people, for every 2 men, there are 5 women. Find the number of women in the town.

18. Find the value of the marked angle K.



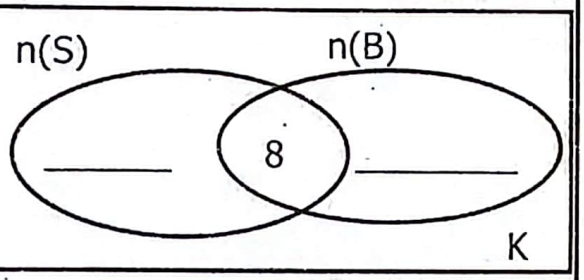
19. How many bottles of 600ml can be obtained from a 2.4 litre Jerrycan?

20. If a = 3, b = 4 and c = 3, find the value of ab-c.

SECTION B

21 a) At a party, 28 guests took beer (B), (k+15) guests took sodas only (S), 8 took both drinks while K did not take any drink.

a) Complete the Venn diagram below. (2mks)



b) If 31 guests did not take beer, Find the value of k. (2mks)

c) Find the probability of picking at random a guest who took only one type of drink (2mks)

22. John has a 17 litres container. He separates the water in a container using three other bottles. One of the bottles holds 2 litres than the smallest one while the largest bottle holds 6 litres more than the smallest bottle. How much water will each bottle hold from the 17 litre container? (3mks)

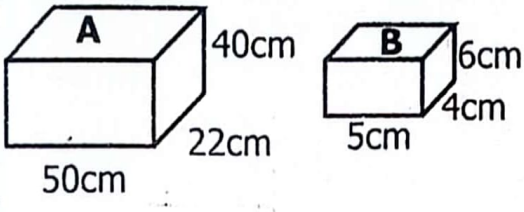
23	a) Express 0.16666... to a common fraction in its lowest terms. (3mks)	b) Simplify: $\frac{0.36 \times 1.2}{0.9 \times 0.6}$ (3mks)
24	At Kamukamu supermarket, 8 pens cost two fifth the cost of a book and a set costs sh. 5000 less than the cost of a book. If the total cost of all the three items is sh. 19000. How much will Peter pay for a dozen of pens? (5mks)	

25. The interior angle of a polygon is 20% morethan its exterior angle.

a) Find the interior angle of the polygon. (3mks)

b) Find the number of triangles in the polygon. (3mks)

26. The figure below shows a big box (A) which a factory uses to pack the small box (B). Use it to answer questions that follow'



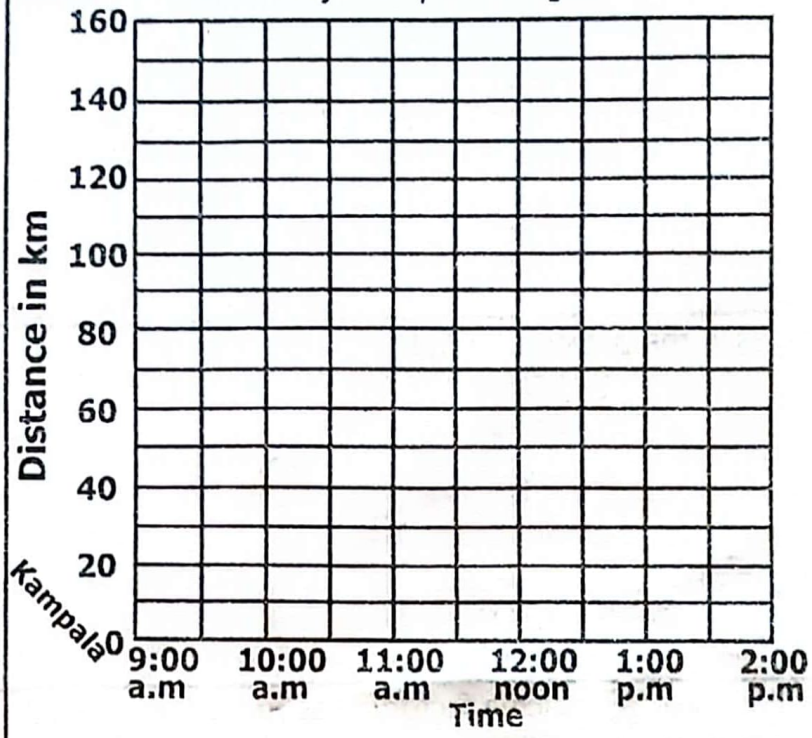
a) Find the total number of small boxes (B) that can be packed in the box (A).

(2mks)

b) Calculate the space left after packing all the small boxes in the big box. (3mks)

27. A motorist driving at 60km/hr left Kampala at 9:00a.m and took one hour to reach Mityana. He rested for 30 minutes, before continuing to Mubende at a steady speed of 50km/hr for 2 hours.

a) Show the motorist's journey on the grid below. (3mks)



b) Calculate the motorist's average speed for the whole journey. (2mks)

28. a) Solve: $2^n \div 2^3 = 32$ (3mks)

b) Write 0.006074 in standard form.

(2mks)

29. A front bicycle wheel moving at a speed of 110km/h for 2 hours makes 100 revolutions. Find the diameter of the bicycle wheel. (4mks)

30. The table below shows how a cyclist travelled from Iganga to Kampala.

Town	Arrival time	Departure time
Iganga		9:45am
Lugazi	10:30am	10:40am
Mukono	11:45am	12 noon
Kampala	1:15pm	

a) Express the arrival time at Kampala in the 24 hours clock system. (2mks)

b) Find the time taken from Lugazi to Kampala. (2mks)

c) If the distance from Iganga to Kampala is 140km, calculate the cyclist average speed for the whole journey. (2mks)

31	John has one son and two daughters, James , Ann and Cissy respectively. James is (K) years old and he is 3 times as old as Ann. Cissy is twice as old as James. The product of the age of the two daughters is 24 years. How old is James. (4 mks)
32	Kule left town A and moved 70°NE to town B at a speed 30km/h for 2 hours. From town B, he turned at a bearing of 120 to town C which is at a distance of 80km. Using a scale of 1cm represents 10km, draw an accurate diagram for Kule's journey (4mks)
b)	Find the shortest distance between town A and town C. (1mk)