

# PRE – P.L.E EXAMINATION (SET 2) 2022

## PRIMARY SEVEN

### MATHEMATICS

Duration: 2 Hours 15 Minutes

NAME: \_\_\_\_\_ STREAM: \_\_\_\_\_

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#### FOR EXAMINER'S USE ONLY

Sections	Marks	Marks scored (%)
A	40	
B	60	
Total	100	

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

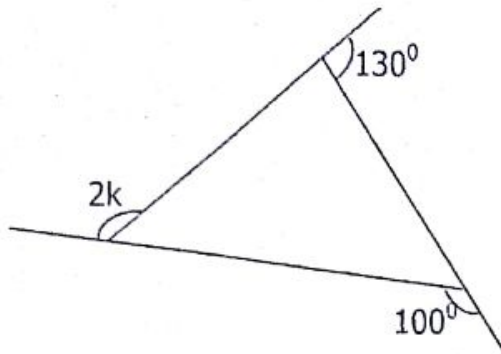
Read the following instructions carefully:

1. The paper has **two** sections: Section A and B.
2. Section A has **40** short questions (40 Marks).
3. Section B has **15** questions (60 marks).
4. Attempt **ALL** questions. All answers to both section 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 graph 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 will lead to loss of marks.
8. Do not fill anything in the boxes indicated for examiners' use only.

**SECTION A (40 MARKS)**

1. Subtract 6 from 9.
2. Find the value of the even digit in the number 52379.
3. Draw a Venn diagram and shade  $P \cap Q = P$ .
4. Prime factorise 36 and write your answer in set notation.
5. Workout:  $2\frac{1}{4} + \frac{1}{3}$
6. Muwema wrote the digits 3, 2, 5, 2, 3, 4 and 2 on different flash cards. Find the mode of the number that she wrote.

7. Find the value of  $k$  in the figure below.



8. A plane left Entebbe Airport on Monday night at 9:30pm hours and arrived in Dubai on Tuesday morning at 2:15am hours. How long was this flight?
9. A minute hand of a clock face made a complete turn to cover 44cm. How long is the minute hand?
10. Nuwasasira read a booklet from page 242 to page 276 during her revision. How many pages did she read?

11. Simplify:  $8Pm^2 + 4Pq - 2Pm^2 - 7Pq$

12. Simplify:  $+3 - +8$

13. A taxi covered a distance of 180km using a speed of 80km/hr. Calculate the time it took to cover this distance.

14. Which number has been expanded to give;  
 $(4 \times 10^3) + (6 \times 10^1) + (7 \times 10^0) + (5 \times 10^{-1})$ ?

15. Six boys can sweep P.7 south classroom in twelve minutes. How many more boys are needed to sweep the classroom in nine minutes?

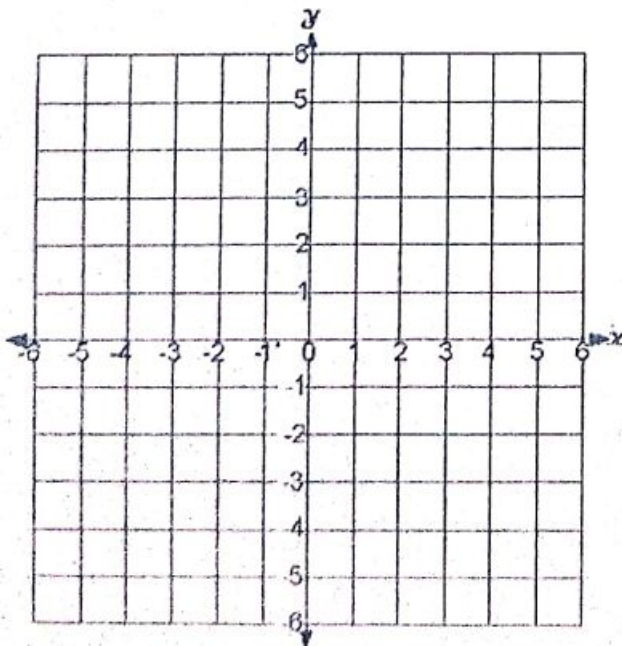
16. Construct an angle of  $75^\circ$  in the space below.

17. Change  $0.45\text{m}^2$  to  $\text{cm}^2$ .

18. Simplify:  $\frac{2}{3}(6P - 3m) + 2P$

19. Simplify:  $m^2 \times m^3 \div m^6$

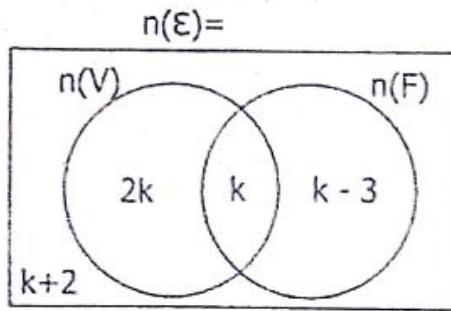
20. Plot the co-ordinate  $A(-3, +4)$  on the grid below.





**SECTION B (60 MARKS)**

21. The Venn diagram below shows the number of players who play football (F), volleyball (V) and other games in St. Francis team.



- (a) If 23 players do not play football, find the value of  $k$ . **(2 marks)**
- (b) If a player is picked at random, find the probability that he plays only one type of game. **(3 marks)**

22. The sum of 3 consecutive counting numbers is 36.

- (a) Find the numbers. **(3 marks)**
- (b) Find their range. **(2 marks)**

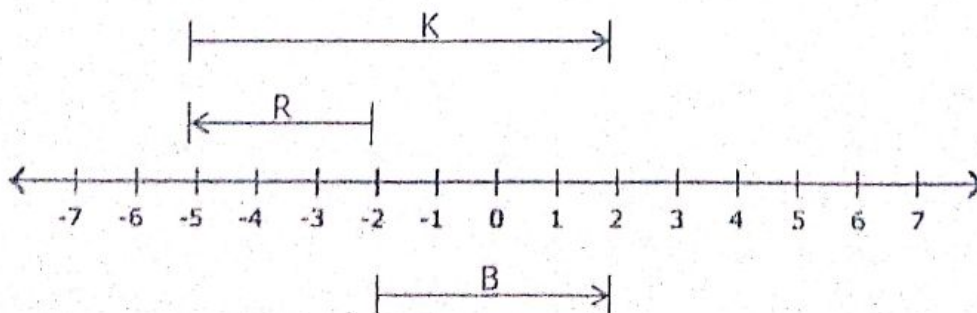
23. A businesswoman bought 30 mangoes at Sh. 1000 each and sold each pair at Sh. 2400. Calculate the percentage profit she got after selling all the mangoes. **(5 marks)**

24. The table below shows the different heights of pawpaw trees in a garden.

<b>Heights (metres)</b>	13	12	10	14
<b>Number of trees</b>	2	3	4	1

- (a) How many trees were planted? **(1 mark)**
- (b) Calculate the height range. **(1 mark)**
- (c) Workout the average height of the pawpaw trees. **(3 marks)**

25. Given the number line below.



(a) Write the integers represented by; **(1 mark each)**

(i) B = \_\_\_\_\_

(ii) K = \_\_\_\_\_

(iii) R = \_\_\_\_\_

(b) Write a mathematical sentence represented by the arrows on the number line above.

**(2 marks)**

26. (a) Construct a triangle PQR where  $\overline{PQ} = 7\text{cm}$ ,  $\angle PQR = 120^\circ$  and  $\overline{QR} = 5\text{cm}$ . Drop a perpendicular line from Q to meet PR at O.

**(5 marks)**

(b) Measure line OQ. **(1 mark)**



27. An empty cylindrical tank has a base area of  $154\text{m}^2$ . The tank was rolled through a distance of  $8.8\text{km}$ .

(a) Find the radius of the tank in centimeters. **(2 marks)**

(b) How many revolutions did the tank make to cover the whole distance? **(3 marks)**

28. Igoola went to the market and bought the following items;

20 tomatoes at Sh. 600 for every 4 tomatoes

500g of salt at Sh. 2400 per Kg

$2\frac{1}{2}$  litres of milk at Sh. 1800 a litre

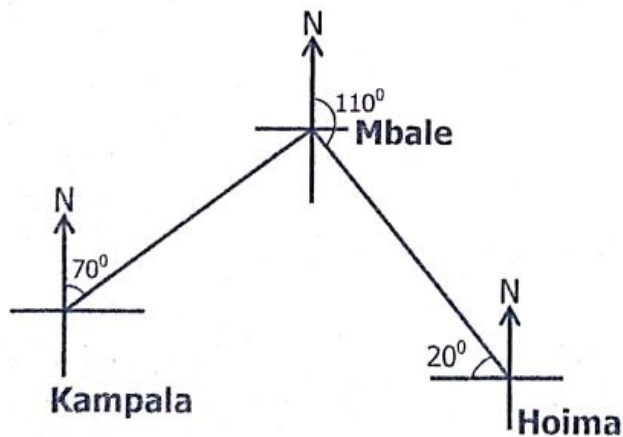
(a) Calculate his total expenditure. **(4 marks)**

(b) If he went with fifteen thousand shillings, find his change.

(1 mark)

29. Lagen organized chairs in her class in rows for a birthday party celebration. When she made 5 rows, one chair remained. When she made 7 rows, two remained and when she made 4 rows, no chair remained. Find the least number of chairs that were in her class. (4 marks)

30. The diagram below shows the location of three towns.

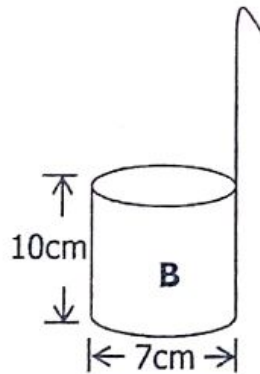
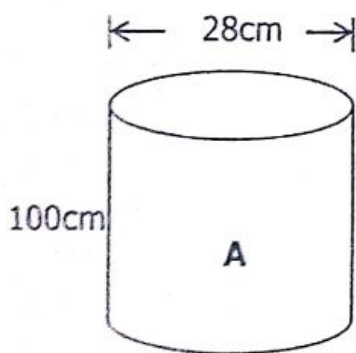


- (a) Find the direction of Mbale from Kampala. (1 mark)

(b) What is the direction of Hoima from Mbale? (2 marks)

(c) Find the bearing of Mbale from Hoima? (2 marks)

31. Gumomanye is a dairy farmer. He sells milk using containers of shape B. A certain week, he sold a full container of milk of shape A using containers of shape B. How many customers bought milk that week? (5 marks)



32. Stella, Richard and Viola shared a certain amount of money in the ratio 2:3:5 respectively.

(a) If Viola got Sh. 120,000; how much did they share altogether? **(3 marks)**

(b) How much more did Richard get than Stella? **(2 marks)**

**END**  
**GOOD LUCK**