

PRE - PLE SPECIAL SET II - 2022

PRIMARY SEVEN - MATHEMATICS

Time allowed: 2 Hours 30 Minutes

Random No.						Personal No.		
Index No.								

Candidate's Name:

Candidate's Signature:

School Random No.

District ID:

Read the following instructions carefully:

1. This paper has **two** Sections: **A** and **B**.
2. All the working for both sections **A** and **B** must be shown in the spaces provided.
3. All working **must** be done using a blue or black ball point pen or fountain pen. Any work done in pencil other than graphs, pictures and diagrams will not be marked.
4. **No calculators** are allowed in the examination room.
5. Unnecessary changes of work may lead to loss of marks.
6. Any hand writing that cannot easily be read may lead to loss of marks.
7. Do not fill anything in the boxes indicated "For Examiners' Use Only"

"For Examiners' Use Only"

SECTION	EXAMINER'S MARKS	T/L MARKS
A		
B		
TOTAL		

FOR EXAMINERS' USE ONLY		
QN. NO	MARKS	SIGN
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

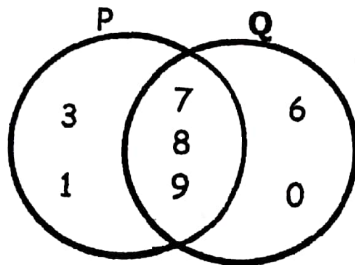
SECTION A: 40 MARKS

Questions 1 to 20 carry two marks each.

1. Workout: $24 + 13$

2. Find the value of 4 tens.

3. Use the Venn diagram below to list members of $Q - P$.



4. Write 2,020 in words.

5. Workout: $-24 \div -3$

6. Express 0.016 as a fraction in its simplest form.

7. Find the square root of 324.

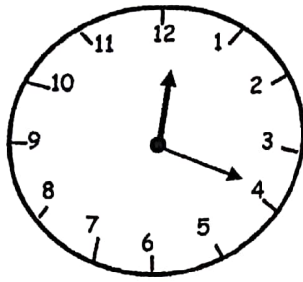
8. Express 18 50 hours in 12 hour clock.

9. Change 400 metres into Kilometres.

10. Using a pair of compasses, a ruler and a pencil only, construct an angle of **75°**.

11. A group of boys shared 184 mangoes. If each boy got an average of 23 mangoes, how many boys shared the mangoes?

12. A Mathematics lesson ended in the afternoon at the time shown on the clock face below. If it took 85 minutes, at what time did it start?



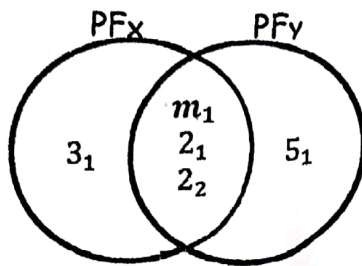
13. Workout: $\frac{m^8}{m^2 \div m^5}$

14. John scored 120 points out of 800 points in a certain game. Express his score as a percentage.

15. Solve for k: $k + \frac{1}{3}k = 36$

16. The interior angle of a regular polygon is 135° . How many sides has the polygon?

17. The Venn diagram below shows prime factors of **X** and **Y**. The greatest common factor (G.C.F) of **X** and **Y** is 68. Find the value of **m**.



18. Workout: $2 \div 3 \pmod{5}$

19. In a market, 14 lemons cost sh. 4,600. How many lemons will one buy with sh. 20,700?

20. An empty box weighs 3.5 Kg. Find the total mass of the box if 45 books each of mass $\frac{1}{2}$ Kg were packed into it.

SECTION B: 60 MARKS.

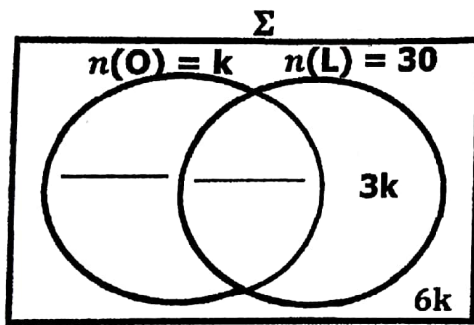
Marks for each question are indicated in brackets.

21. How many times is the place value of digit 8 more than the value of digit 4 in the number 8542? **(4 marks)**

22. In a certain village, k farmers grow oranges (**O**), **30** farmers grow lemons (**L**), **6k** farmers grow other fruits and **3k** farmers grow lemons but not oranges.

(a) Use the given information to complete the Venn diagram below.

(2 marks)



- (b) Find the value of k if **50** farmers do not grow lemons at all.

(2 marks)

- (c) How many farmers grow lemons only?

(1mark)

23. Maria, Monica and Madinah shared a certain number of guavas in the ratio of 3:8:5 respectively. Given that Monica and Madinah shared a total of 52 guavas.
a) Find the total number of guavas shared by the three girls.

(4 marks)

- b) How many guavas did Monica get?

(1 mark)

24. Using a pair of compasses, a ruler and a pencil only,

- a) Construct triangle **KLM** in which line **KL = 7.5cm**, line **KM = 6cm** and angle **MKL = 135°**.

(4 marks)

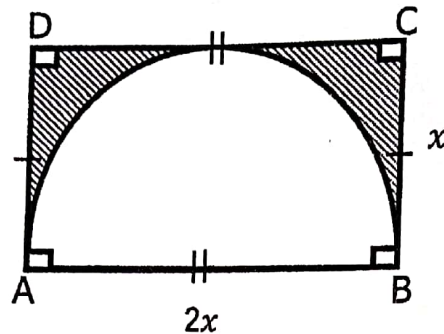
- b) Measure angle **KLM**.

(1 mark)

25. In the rectangle **ABCD** below, the shaded area measures 189 cm^2 .

Find the arc length of the unshaded part.

(4 marks)



26. Daudi distributed his cows to his sons and his two daughters. He gave his daughters $\frac{2}{5}$ of the number of cows to share equally, and the rest of the cows were shared by his sons. Each of the sons got $\frac{1}{10}$ of the total number of cows distributed.

(a) Find how many children shared the cows.

(3marks)

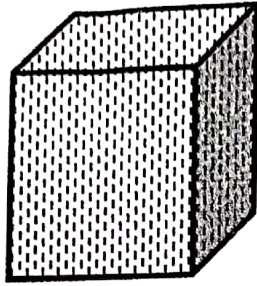
(b) If each daughter got 10 cows, calculate the number of cows Daudi's daughters and sons shared altogether. **(2marks)**

27. A trader went to a FOREX bureau and exchanged Uganda shillings (UGX) 20,720,000 into United States dollars (USD) and Uganda shillings (UGX) 1,064,000 into Kenya Shillings (KES). He received USD 5,600 and KES 28,000.
- (a) Find the exchange rate of;
- i) One US dollar to Uganda shillings. **(2 marks)**

- ii) One Kenya shillings to Uganda shillings. **(2 marks)**

- (b) Using the rates at the FOREX bureau, convert KES 740,000 into USD. **(2 marks)**

28. The diagram below represents a rectangular hand washing rectangular container which was filled with water. It has a capacity of 18 litres and base area 360 cm^2 .



- a) Find the height of the container.

(3marks)

- b) A 600 ml cup was used to fill the above container with water. How many full cups filled the container?

(2marks)

29. A motorist drove at a steady speed of 90 km/h for 1 hour 30 minutes from town **A** to town **B**. He returned at an average speed of 45 km/h.

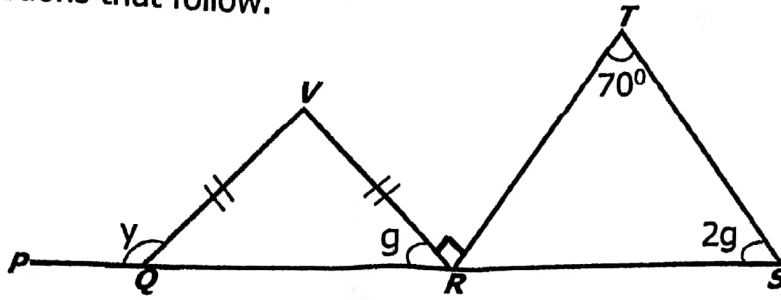
- a) Find the distance between town **A** and town **B**.

(2marks)

- b) Find the total time taken for the whole journey.

(3marks)

30. In the figure below, point Q and R lie on a straight line PS . VR is perpendicular to RT and line $VQ =$ line VR . Study the figure and use it to answer the questions that follow.



Find the size of;

- i) angle g .

(3marks)

- ii) angle y .

(2marks)

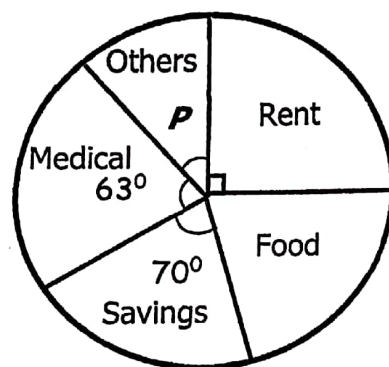
31. a) Simplify: $\frac{7d-1}{3} - \frac{2d+4}{6}$

(2marks)

b) Given that $r = \frac{5r-8}{3}$. Find the value of m if $37 - r = 2m - 1$.

(4marks)

32. The pi-chart below shows how Mr. Mapenzi used his weekly income of sh.108,000.



a) If he used sh.26,100 on food, find the value of p in degrees.

(4marks)

b) Express the angle sector for food as a percentage.

(1mark)

End

Page 11