THE PEARL EXAMS 2024

REAL BLUE PRINT PRE –PLE 2024
CLASS : P.7
SUBJECT : MATHEMATICS
DURATION: 2 HOURS 30 MINUTES

Index No.

Candidates Name ……..

Candidates' Signature ……..

District Name …….

Read the following instructions carefully.

1. This paper has **two** Sections: **A** and **B**.
2. Section **A** has 20 answer questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. Answers to both sections must be written in the spaces provided.
5. All answers must be written using a blue or black ballpoint pen or ink Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the box indicated for examiner's use only.

FOR EXAMINERS USE ONLY		
QN. NO.	MARK	SIGN
1 - 10		
11 - 20		
21 - 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

SECTION A (20 Questions - 40 marks)

1. Add: 8 + 10 =

2. Change 131_{four} to base ten.

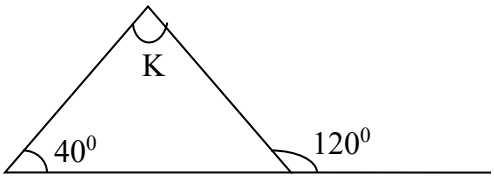
3. Add: -3 + -7 using a number line.

4. If x = -4, y = -5 and z = $\frac{1}{2}$, evaluate xy ÷ z

5. Prime factorize 36 and give your answer in power form.

6. Express $7\frac{1}{2}$% as a proper fraction in its simplest form.

7. Study the diagram below and find the value of K in degrees.



8. Find the square root of $1\frac{11}{25}$

9. A minute hand of a clock moved from 9:15am to 9:30am. Calculate the angle that the minute hand turned.

10. The median of 3 consecutive even numbers is 10. Find the sum of all numbers.

11. Draw, indicate and state all the lines of folding symmetry on a rectangle.

12. In a group of 40 pupils, 15% are girls and the rest are boys. Find the actual number of boys.

13. The area of a circle is 154mm^2. Find its circumference.

14. Work out:
$$\begin{array}{r} 398 \\ \times\ 12 \\ \hline \end{array}$$

15. Given that A = 2x + 4 and B = x + 10.
Solve for x if A = B

16. Change $\frac{1}{8}$ to a decimal fraction.

17. Find the range in ; 8, -12, 0, 6 and 13

18. Irene drove a car at a speed of 70km/hr for 2 hours. If she returned using the same route, how many km did she drive?

19. Set A has 32 subsets. Find the number of elements in set A.

20. Work out:

	Hours	**Minutes.**
	4	45
+	3	35

SECTION B (12 QUESTIONS 60 MARKS)

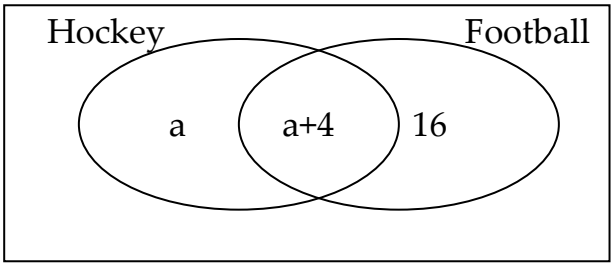
21. With the help of a sharp pencil, ruler and pair of compasses, construct a triangle PQR where angle PQR = 45^0, angle QPR = 60^0 and line PQ = 8cm.
Drop a perpendicular line from point R to meet line PQ at point O. (4 marks)

Measure;

(i) Line RO …….. (1 mark @)

(ii) angle PRO ……

22. On the Venn diagram below, 24 pupils play Hockey (H).



a) Find the value of a. (2 marks)

b) How many pupils play one game?(2 marks)

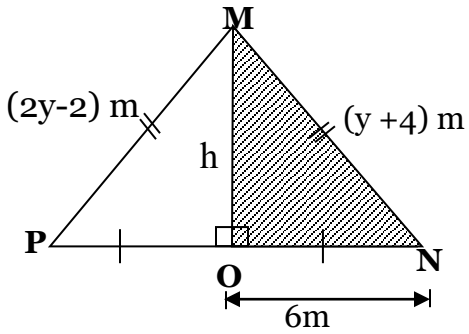
23. Peter went to Capital shoppers super market and bought the following items;
2 tubes of tooth paste at shs. 8,000, a pair of shoes at shs. 100,000, 5 plastic soda bottles at shs. 2,000 @ and 3 basins at shs. 4,500 @.

a) How much did he spend on all the items? (2marks)

b) If he went with three fifty thousand shilling notes, calculate his change after shopping. (2 marks)

c) Assuming he was given a discount of 10%, after shopping, calculate the actual amount of money he would have paid. (1 marks)

24. Study the diagram below and answer the questions that follow.



a) Find the value of y in meters (2 marks).

b) Calculate the area of the entire triangle. (3 marks)

c) A spider moved round the entire triangle three times, what distance did it cover? (1 marks)

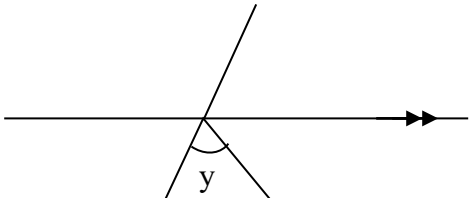
25. (a) Solve : $\frac{(x-2)}{2} = \frac{(x+2)}{3}$ (2 marks)

(b) Pingu is twelve years older than Wingu. In 8 years' time, their total age will be 48 years.

(i) How old is Pingu now? (2 marks)

(ii) How old will Wingu be in fifteen years' time to come? (1 mark)

26. Study the diagram below and answer the questions that follow.



z

Find the value of; (1 mark @)

i) x

ii) y

iii) z

27. In a group of customers that entered NAKU'S restaurant, $\frac{3}{8}$ ordered for rice, $\frac{1}{5}$ of the remainder ordered for matooke while twenty ordered for posho.

a) What fraction of the customers ordered for; (2 marks @)

i) Matooke

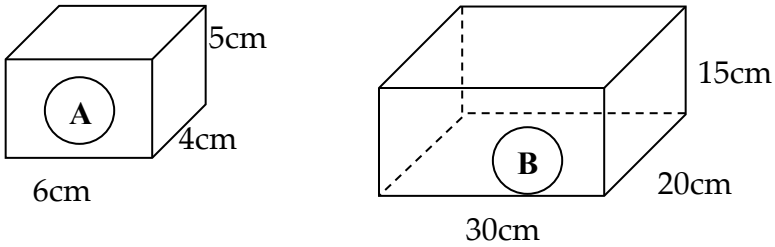
ii) Posho

b) How many customers in total entered NAKU'S restaurant? (2 marks)

28. (a) Change 72km/hr to m/s. (2 marks)

(b) Angella drove her car and covered 148km from 10:20am to 12:20pm. At what speed did she drive? (2 marks)

29. Small boxes of type (A) were packed in a big box of type (B) for export to Kigali in Rwanda.



a) How many small boxes of type (A) will fill the bottom layer? (2 marks)

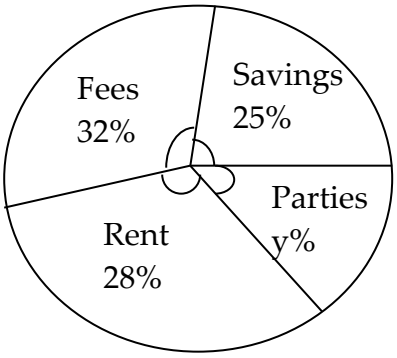
c) How many small boxes of type (A) will be packed in the big box of type (B)? (2 marks)

d) Calculate the volume of the empty space left after packing. (2 marks)

30. Tumusiime bought a brief case at shs. 100,000 and sold it to Patel making a loss of 10%.
    a) How much did he sell it to Patel? (2 marks)

b) If Patel sold the same brief case to Johnson and made a profit of 20%, how much did Johnson pay? (3 marks)

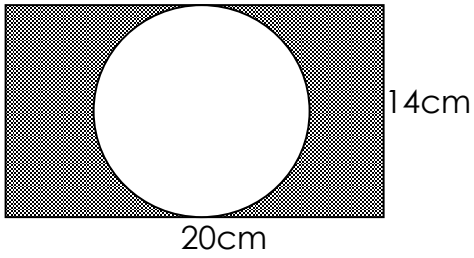
31. The pie chart below shows how Mr. Lukaluka spent his money monthly.



a) Express the sector of parties in degrees (3 marks)

b) If he spent 560,000/= on rent, work out his total income per month. (2 marks)

32. The figure below is a rectangle with a circle enclosed. Find the area of the shaded part. (Use π as $\frac{22}{7}$) **(05marks)**



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