HORMISDALLEN SCHOOL - KYEBANDO
PRE-PLE SET 5 EXAMINATION, 2023
PRIMARY SEVEN MATH
Duration: 2 Hours 15 Minutes

NAME: _____ **STREAM:** _____

INDEX NO | | | | | | | | | **EMIS NO.** | | | | | |

SECTION A (40 MARKS)

Questions 1 to 20 carry two marks each

1. Divide: $3\ 6 \div 9$

2. Find the square root of $1\frac{7}{9}$

3. Solve for x: $2.5 - 2x = 0.5$

4. Find the next two numbers in the sequence below

    81, 27, 9, 3, _____, _____

5. A mathematics lesson lasted for $1\frac{3}{4}$ hours. If it began at 11 :30am, at what time did it end?

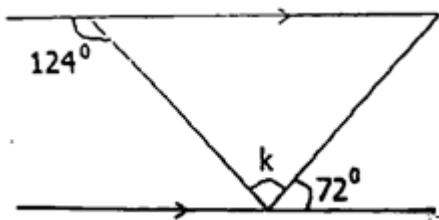6. Joab is 2years younger than Abdu. If their total age is 36 years, how old is Abdu?

7. Find the radius of a circle whose area is 38.5cm^2

8. Joram received 18 bank notes of the same denomination amounting to sh. 90,000. Calculate the value of each bank note.

9. Calculate the mean of 6m + 5, 7 and 9m - 3
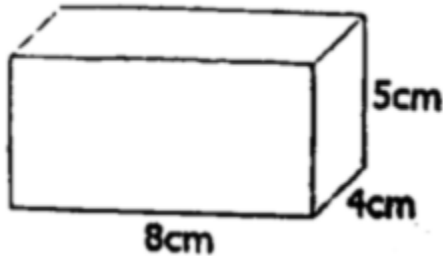
10. Expand 34.98 using powers of ten

11. Find the size of angle marked k

12. Four men can slash a compound in nine days. How many more men are needed to do the same piece of work in two days?

13. Opio turned through an angle of 225° clockwise to face South East. Find his original direction
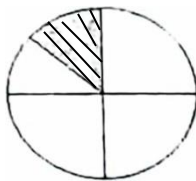
14. Find the length of the wire needed to make the figure below;

5cm

4cm

8cm

15. Workout: 2 - 3 =_____(finite 5) using clock arithmetic.

16. The length and width of a rectangle are in the ratio of 5:2 respectively. If the perimeter of the rectangle is 28dm, find its actual length.

17. Find the percentage of the un shaded part

18. The direction of town A from town B is S65^{0}W. Find the bearing of town B from town A

19. Express $\frac{5}{8}$ as a decimal fraction

20. Workout the complement of $y + 60°$

SECTION B (60 MARKS)

21. A school driver drove at 60km/hr for 3hours from town A to town B. He then returned to town A at a speed of 90km/hr
    (a) Calculate the distance from town A to town B   (2 marks)

    (b)   Calculate the average speed for the whole journey   (3 marks)

22.   In a group of people, $\frac{3}{5}$ of them are males and the rest are females. If $\frac{2}{3}$ of the males are boys and $\frac{1}{2}$ of the females are girls and there are 1200 adults in the city, find the total population of the people in the city.   (5 marks)

23. a) Using a ruler, a sharp and a pair of compasses construct a *triangle* ABC in which AB = 8cm, angle ABC = angle BAC = 45°. Drop a perpendicular line from C to meet AB at D. (4 marks)

(b) b) Measure angle BCD (1 mark)

24. The table below shows the arrival and departure time for a bus moving between Mbarara and Kampala
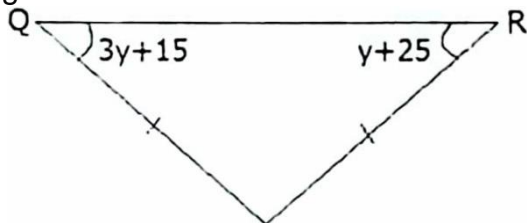
TOWN	ARRIVAL	DEPARTURE
Mbarara		08 45hrs
Lyantonde	09 30hrs	09 35hrs
Masaka	10 OOhrs	10 14hrs
Lukaya	10 45hrs	10 55hrs
Nateete	11 40hrs	11 50hrs
Kampala	12 1 5hrs	

(a) How long did the bus take to travel from Lyantonde to Nateete?

(2 marks)

(b) For how long did the bus stay at Lukaya? (1 marks)

(c) If the distance between Mbarara and Kampala is 256km. Calculate the average speed of the bus for the time it spent travelling?

(2 marks)

25. A lorry full of sand weighs 20.7 tonnes. The weight of the empty lorry is 4.7 tonnes.
    a) Workout the weight of the sand (2 marks)

b) Calculate the weight of the lorry when $\frac{3}{4}$ full. (3 marks)

26. . The figure below PQR is an isosceles triangle

a) Find the value of y in degrees (2 marks)

b) Find the size of angle QPR   (3 marks)

27. (a) Solve for p: $\frac{1}{2}(4p - 2) = p + 2$ (2 marks)
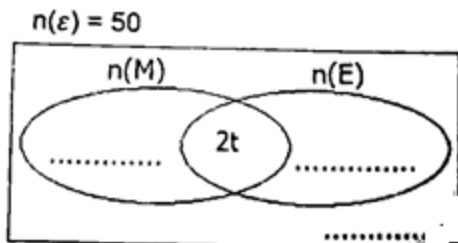
(b) Musa is 20 years older than Sarah. In 8 years' time, Musa will be thrice as old as Sarah. How old is Musa now?   (3 marks)

28. In a class of 50 pupils, 28 like mathematics (M), $3t-8$ like English (E) only while $2t$ like both subjects.
    a) Complete the Venn diagram below   (3 marks)

$n(\varepsilon) = 50$

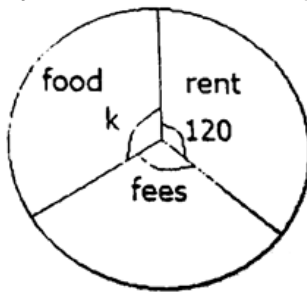b) Find the value of t   (2 marks)

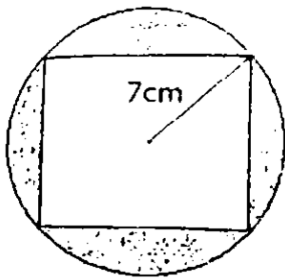c) How many pupils don't like English?   (1 marks)

29. The pie chart below shows how a family spends its income of sh.432,000. Study it carefully and answer the questions that follow.

a) If they spend sh. 108,000 on fees per month, find the value of k.

(3 marks)

b) How much less does he spend on rent than on food per month?

(2 marks)

30. Study the figure below and answer questions that follow

a) Calculate the area of the outer figure   (2 marks)

b) Workout the area of the shaded part   (3 marks)

31. A retailer bought a tray of 30 eggs at sh. 500 each egg. During transit, p eggs got broken and he sold the remaining eggs each at sh. 800, making a profit of sh. 4200. Find the value of p.   (4 marks)

32. Simplify: $\frac{2}{5} \div \frac{3}{10} + \frac{1}{4} - \frac{1}{5}$

b) Angle spent 40% of her salary on rent and 50% of the remainder on other items. She was left with sh. 300,000. How much money did she have at first?   (3 marks)

END

GOOD LUCK