HORMISDALLEN SCHOOL - KYEBANDO
PRE-PLE SET 8 EXAMINATIONS, 2023
PRIMARY SEVEN MATH
Duration: 2 Hours 15 Minutes

NAME: _____ STREAM: _____

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

SECTION A: (40MARKS)

1. Work out
$$
\begin{array}{r}
3\ 4\ 6 \\
+\ 14\ 8 \\
\hline
\end{array}
$$

2. Write 96 in Roman numerals,

3. Convert 17_{ten} to binary base.

4. Write 637 in standard form

5. On the clock face below, show 20 minutes to 11 O'clock.

1

6. Solve: $3^{2a} + 81 = 1$

7. Given that set K={a,b, c), how many subsets has set K?

8. List down the prime factors of 144 ..

9. Given that $p = \frac{1}{2}$, $q = \frac{2}{3}$ and $r = \frac{1}{4}$, find the value of p + qr

10. Using a ruler, a pencil and a protractor, draw an angle of 55^0 in the space provided below.

11. Simplify: $\frac{3}{4} + 1\frac{1}{2}$

12. If today is Wednesday; what day of the week will it be 40 days from now?

13. If represents 12 trees, draw such pictures to represent 60 trees.

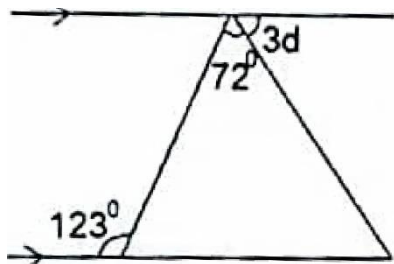14. The base area of a cylindrical tin is 308cm³. Calculate its volume if its height is 15cm.

15. A trader sold an article at sh. 7900 making a profit of sh. 700. Calculate the cost price of the article.

16. Find the least number of books given to 12 or 15 pupils and 3 books remain ..
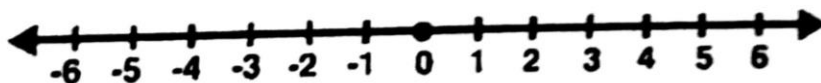
17. Increase 8400 kg by $12\frac{1}{3}\%$

18. Calculate the circumference of a circular garden whose diameter is 28cm.
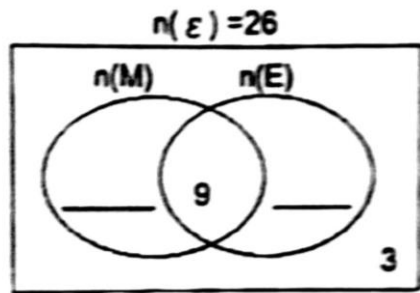
19. Find the value of d in the ngure below;

20. Work out $(^+4) - (^-5)$ using a number line below

21.   In a school of 26 teachers, 14 teach Maths(M), 3 teach English (E) only, 9 teach both subjects while 3 teach other subjects.

a) Complete the Venn diagram using the above information.   (02 *marks)*

n(ε) =26

n(M)   n(E)

9

3

b) How many teachers teach in English?   (02 *marks)*

c) Find the probability of choosing at random a teacher who teaches one subject. (01 mark)

22. The sum of three consecutive odd numbers is 75. If the first number is K,

a) Find the value of K.   **(03 *marks*)**

b) Work out their range.   (02 *marks)*

23. a) Using a ruler and a pair of compasses, construct a triangle BCD where BD = 6cm, angle BCD = 75^0 and angle DBC = 45^0. (04 marks)

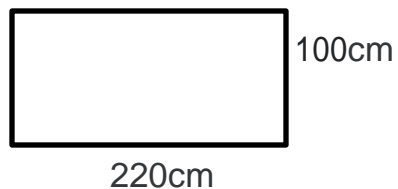b) Measure length CD. (01 mark)

24. a) Work out: (02 marks)

4 3 2 five

+ 1 3 4 five

b) Given that $46_p = 202_{five}$, find the value of p. (03 marks)

25. a) Express 0.233........to a common fraction in its lowest terms. (02 *marks)*

b) Simplify: $\frac{16.2-9.95}{1.25 \; x \; 0.05}$ (03 marks)

26. A piece of metal below was folded to form a cylindrical container.

$$100cm$$

$$220cm$$

a) Calculate the area of the piece of metal above. **(02 marks)**

b) Work out the volume of the cylindrical container formed. (take $\pi = \frac{22}{7}$) (03 marks)

27. a) Simplify: $\dfrac{6m^8 \times 4m^3}{8m^4}$ (02 marks)

b) Solve: $\dfrac{3p+1}{4} = \dfrac{p+2}{3}$ (03 marks)

28. Rose went to market and bought the items as shown in the table below;

a) Complete the table below. (04 marks)

Item	Quantity	Unit cost	Amount
Wheat flour	2 packets	Sh. 7,000 each	Sh…………..
Cooking oil	$1\frac{1}{2}$ litres	Sh. a litre	Sh. 13,500
Rice	…………….kg	Sh. 3600	Sh…………..
	…………….kg	TOTAL	Sh. 38,300

b) If she was given a change of sh.11,700, how much money did she have before shopping? (01 mark)

29. The interior angle sum of a regular polygon is 1440^0.

   a) Calculate the number of sides of the polygon. (03 *marks*)

   b) Work out the size of its exterior angle (02 *marks*)

30. Tom had $\frac{3}{4}$ sugarcane and gave $\frac{1}{9}$ of it to Bashirah.

   a) What fraction did he remain with? (03 *marks*)

   b) If the part he remained with was 400cm long, find the total length of the sugarcane. (02 *marks*)
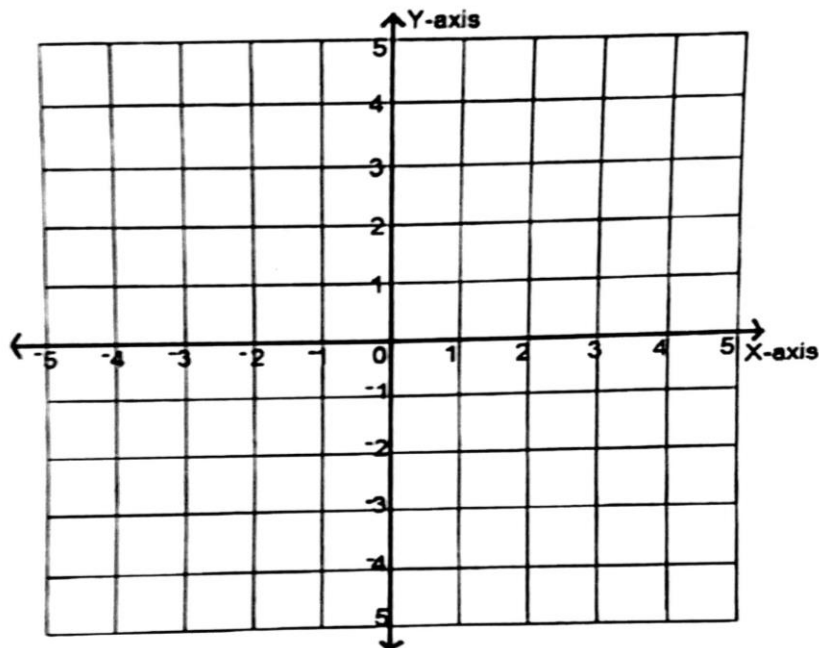
31. a) Express 25m/sec to km/h.   (02 *marks*)

b.) A motorist covered a journey at a speed of 54km/h in $4\frac{1}{2}$ hours. How long will the motorist take to cover the same distance at a speed of 81 km/h?   (03 marks)

32. a) On the coordinate graph below, plot the following points. (03 marks)

A(-1, 2) , B(-3, -1) and C(1, -1)

b) Plot point D and join A to B, B to C, C to D and D to A such that the figure formed is a parrallelogram

c)   State the coordinates of point D.   (01 mark)