BETTER EDUCATIONAL CONSULTANCY

PRE-PRIMARY LEAVING EXAMINATION

SPOT ON SET 1, 2022

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	**Random No.**							**Personal No.**		

Candidate's Name: .....

Candidate's Signature: .....

School Random No. .....

District ID: .....

Read the following instructions carefully:

1. Do not write your **school** of **district** name anywhere on this paper.

2. This paper has two sections: **A** and **B**. Section **A** has **20** questions and section **B** has **12** questions.

3. Answer **all** questions. **All** answers to both sections **A** and **B** must be written in the spaces provided.

4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.

5. **No calculators** are allowed in the examination room

6. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks.**

6. Do not fill anything in the table indicated: **"for examiner's use only"** and boxes inside the question paper.

FOR EXAMINER'S USE ONLY

Qn. No	MARK	EXR'S NO.
1 – 5		
6 – 10		
11 – 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

Tel: 0779101164, 0750558616, 0706602422, 0775157214.

SECTION A:

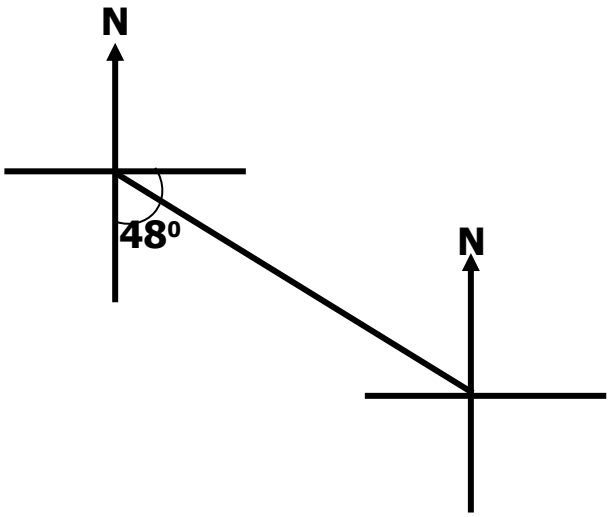
1. Work out:
$$\begin{array}{r} 5\ \ 2 \\ -\ 4\ \ 2 \\ \hline \\ \hline \end{array}$$

2. Write in words: **Six hundred three thousand four hundred ninety four.**

3. Given that M = {all vowels} and N = {a, b, c, d, e}. Find **n(N-M).**

4. Convert $\mathbf{101}_{two}$ to a decimal base.

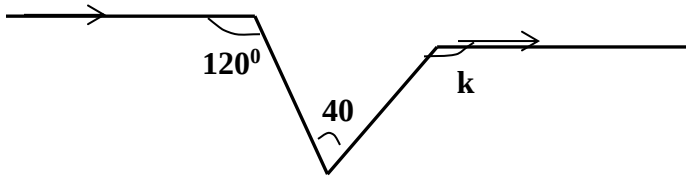
5. In the figure below, find the bearing of town P from K



6. Find the square of the next term in the sequence below.
   81, 27, 9, 3, 1, _____

7. A customer paid sh.72, 000 for a shirt after a discount of 10%. What was the marked price of the shirt?

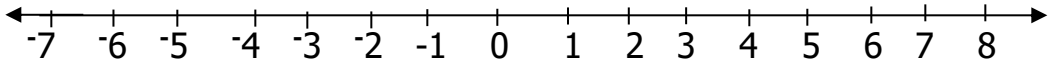
8. Find the value of **k** in degrees.



9. A motorist covered 80km in 40 minutes. At what speed was he travelling in km/hr?

10. Solve the inequality: $2 - \frac{1}{3}y \leq 6$

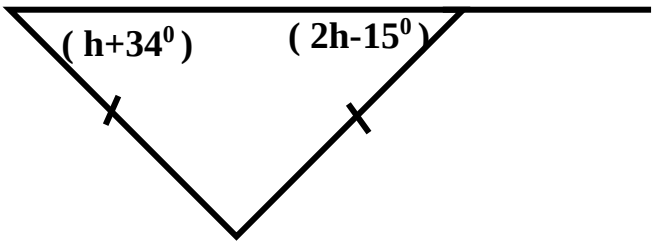
11. With the help of the number line below, work out 3 x 2.



12. How many 250gm packets can be got from a 50kg bag full of wheat flour?

13. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of **105^0**.

14. On the figure below find the value of ***h***



15. Subtract: $6y + 5$ from $y - 3$

16. If $p+4 = 1$ (**mod 5**), find the value.

17. A tin contains 45 blue and red pens. The probability of picking at random a red pen is $\frac{2}{3}$. How many blue pens are in that tin?

18. The area of a square garden is $0.64km^2$. Find the length of each side of the garden.

19. Simplify: $\frac{1}{2}$ of $\frac{3}{4} \div \frac{3}{5}$

20. A double forty five minute lesson started at ***2:45pm.*** At what time did it end?

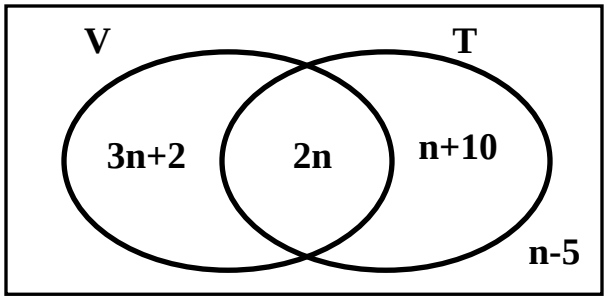
SECTION B:

21. Given that the number of tourists who visit Uganda from Europe every year is **87,809**

a) Expand that number using powers of base ten**.** **(2 mks)**

b) Work out the product of the value of 7 and the place value of 9. **(3 mks)**

22. The Venn diagram below shows players in a certain club that enjoy playing Volleyball (**V**), Tennis (**T**) and other games. Study it carefully and use it to answer the questions that follow.



a) Given that the number of players who play tennis is equal to those who don't play tennis, find the value of **n**. **(2mks)**

b) How many payers are in this club? **(2 mks)**

c) What is the probability that a player picked at random plays either game? **(1 mk)**

23. A trader used $\frac{3}{4}$ of her total sales to buy new goods, 50% of the remainder to pay for transport costs and banked sh.5, 000,000. How much was her total sales? **(5 mks)**

24. Amos is 20 years older than Paul. In six years' time, Paul will be half as old as Amos.

a) How old is each now? **(3mks)**

b) How old will Amos be then? **(2 mks)**

25. The interior and exterior angles of a regular polygon are in the ratio of 3:2 respectively.

a) Name the polygon. **(3 mks)**

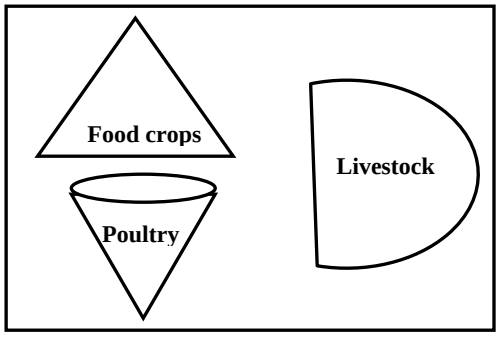
b) Work out the number of right angles the polygon has. **(2 mks)**

26. a) Work out:

$$\begin{array}{rrrr} & 3 & 3 & 4_{six} \\ + & 1 & 2 & 4_{six} \\ \hline & & & \\ \hline \end{array}$$

b) Given that $83_{nine} = 203_{p}$, Find the value of **p** **(3 mks)**

27. Below is Mr. Matovu's farm. Study it carefully and answer the questions about it.



Given that the distance round the plot gazetted for livestock is 144m, calculate the area of the livestock plot. ($\pi = \frac{22}{7}$) **(4 mks)**

28. A parent went shopping and bought the following;
- 3 dozens of books at sh.700 per book
- 45 passion fruits at sh.1,000 for every 5
- 750ml of cooking oil at sh.9,000 each litre

a)Calculate her total expenditure. **(4mks)**

b)If she was given change of sh.3,050, how much money did she go with? **(1mk)**

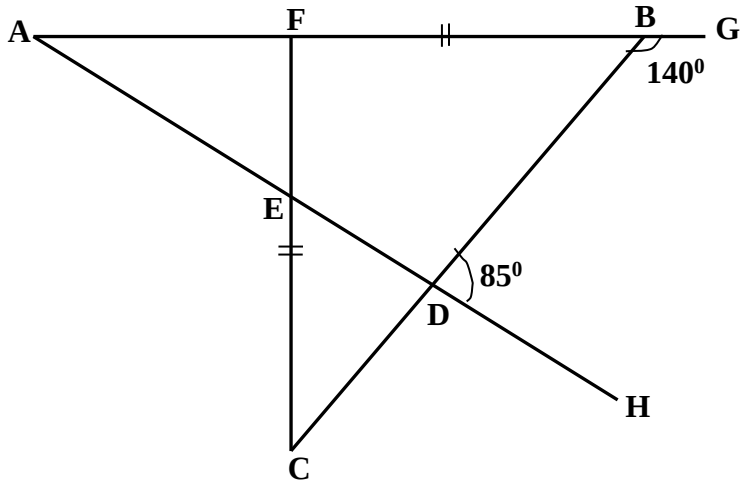
29. Joseph borrowed shs.450,000 from a village SACCO at a simple interest rate of $12\frac{1}{2}$ % per annum for a loan period of 2.5 years.
a)Calculate the simple interest he paid after one year. **(2 mks)**

b)Find the total amount of money he paid to the bank by the end his loan period. **(3 mks)**

30. a) Using a ruler, pencil and a pair of compasses only, construct a triangle **NBS**, where **NB**= 7cm, angle **NBS**=120^0 and angle BNS is $\frac{1}{4}$ of **NBS**. **(4 mks)**

b) Measure angle **NSB** _____ **(1 mks)**

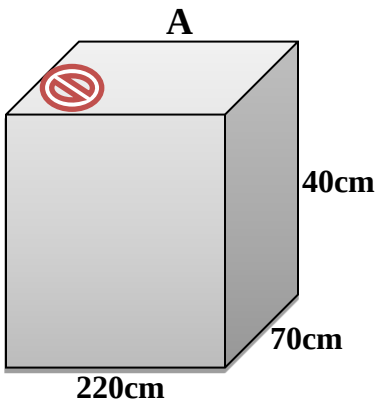
31. In the figure below. AG is a straight line. Line FB = FC. Angle GBD = 140^0 and HDB = 85^0. Use the figure to answer the questions that follow.

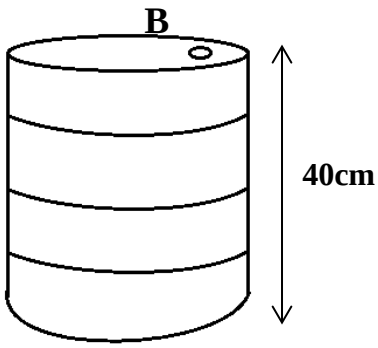


a) Find the size of angle FAE. **(3mks)**

b) Work out the size of angle FED. **(2mks)**

32. The two petrol tanks **A** and **B** shown below hold the same amount of petrol when filled up completely.





a) Find the amount of petrol tank **A** can hold in litres when full? **(3mks)**

b) Find the diameter of tank **B** (take $\pi = \frac{22}{7}$). **(3mks)**

END