

RWENZORI REGION SESEMAT
S1 END OF YEAR ASSESSMENT 2022
MATHEMATICS
TIME 1 ½ HOURS

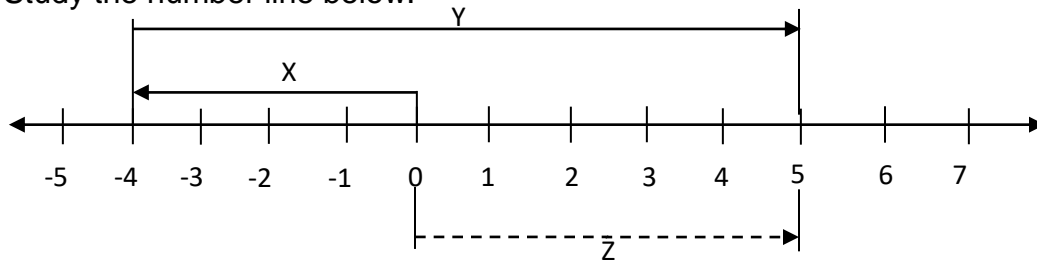
INSTRUCTIONS

1. Attempt all the questions in section **A** and any two in section **B**
2. All necessary working must be done in the answer sheets provided
3. Simple non programmable scientific calculators may be used

SECTION A (SHORT RESPONSE QUESTIONS)

1. Find the sum of the prime factors of 60.

2. Study the number line below:



- (a) State the values of X, Y and Z
 - (b) Write the mathematical expression, in figures, the number line is solving.
3. Test is marked out of 15. The following marks were obtained by 10 learners in a class

8	10	12	12	8
12	12	11	9	10

 - (i) Identify the type of data
 - (ii) Draw a tally chart for the data
 4. A ship sails from point K to point L on a bearing of 130° .
 - a) Show the positions of K and L on a sketch diagram.
 - b) On what bearing will the ship have to sail to return from L to K?
 5. For the sequences 4, 6, 8, 16, 32, _____, _____, _____
 - a) State the general rule for the pattern.
 - b) Determine the next three terms of the sequence.

6. Three bells ring at intervals of 12 minutes 15 minutes and 18 minutes if they first ring together at 8:00 am.
After how long will the bells next ring together?
7. The entry fee to a concert is 10,000= and the cost of each bottle of soda is 2,500=
 - a) If Mulenga went for leisure to the concert formulate an equation relating the total of the entry fee and the number of soda's he bought.
 - b) How much did he spend after buying 4 sodas?
8. The distance from Mbale to Kampala is assumed to be 400km. A bus travelling from Mbale to Kampala makes a stopover at station A. At station A, it has covered $\frac{1}{8}$ of the distance. What is the distance from station A to Kampala?

SECTION B (EXTENDED RESPONSE QUESTIONS)

1. A learner was given a task of plotting the following points of the grid
A(-5,2) , B (-6,-1) C, (-5,-3) , D(-2,-4)
 - (i) Plot the points for the learner to form a polygon.
 - (ii) Reflect the polygon in the y axis and state the co-ordinates of the image.
2. Using a ruler and a pair of compasses only construct;
 - a) A triangle ABC in which angle ABC = 60° , AB = 4cm, BC = 5.4 cm
 - b) Measure;
 - (i) angle BCA
 - (ii) Length AC
 - c) Draw a circle circumscribing triangle ABC and then measure the radius of the circle.
3. A company is distributing 600 books to four homes. The first home got 12%, the second home got 15%, the third home got 33% and the fourth home got the balance of the books
 - a) What percentage did the fourth home get?
 - b) The Company bought each book at sh 200 = each and was given a discount of 10% for all the cost of the books. Find how much the company paid for the books.
 - c) If the shopkeeper had bought the books at sh 120 = each, find the profit they made.

END