



# **SHAPTA JOINT ASSESSMENT BOARD**

Uganda Certificate of Lower Secondary Education

**ACTIVITY OF INTEGRATION 2023**

MATHEMATICS

**SENIOR ONE**

1 hours: 45 Mins

## **INSTRUCTION TO LEARNERS**

The Learner respond to **all** tasks.

Use **Neat** handwriting.

**THEME: NUMBERS**

**TOPICS: WORKING WITH INTEGERS.**

**LEARNING OUTCOMES ASSESSED**

1. Identify, read and write natural numbers as numerals and words in million, billion and trillion.
2. Use directed numbers in real life situations
3. Use the hierarchy of operations to carry out the four operations on integers.  
( $+$ ,  $-$ ,  $\times$ ,  $\div$ )
4. Find the Prime factorization of any number.
5. Relate common factors with HCF and multiples with LCM
6. Convert mixed fractions into improper fractions.

### SCENARIO ITEM (20 SCORES)

Mary, Penny and Sarah are friends that live together. They all work as shop attendants in different shops and they rent the same house sharing rent fees. Mary's shop sales pens as ones at Shs.500, Penny's shop sells pens in pairs at Shs. 1,200 per pair and Sarah's shop sales pens in bundles of five at Shs. 4,000 each bundle. A full box of pens contains 50 pens and is bought. On one day, Sarah sold 2 boxes of Pens, Mary sold pens that are half Sarah's pens and Penny sold pens that are thrice Mary's pens.



**TASKS:**

- a) How much did each individual earn that day?
- b) If they sell the same number of pens every day, how much will each individual have at the end of the month of 30 days?
- c) If at the end of the month Penny contributes  $\frac{1}{4}$  of his income towards rent, Mary contributes  $\frac{1}{3}$  of his income towards rent and Sarah contributes money that is less than that of Penny by shs.150,000, how much will they have all together for rent at the end of the month in words?
- d) If you bought pens from Penny's shop every day while storing in your drawer for five days and your friend buys from Sarah's shop every day while storing in his drawer for also five days. What is the smallest common number of pens you two will have in the drawers?
- e) If you two decide to share your pens with your other friends in class, what is the highest number of friends you will share your pens with.
- f) Prime factorize pens of two boxes.

**END**

