

**END OF TERM 1 FORM ONE  
MATHEMATICS EXAMINATION 2023**

*Attempt all questions*

*Duration 1hour: 30 minutes*

NAME..... STREAM.....

**SECTION A**

1. Suppose you attended a mathematics contest and question one on screen happens as follows. How would you find the solution to this problem? (4 marks)

$$\left\{ \begin{array}{r} \text{(a)} \quad 4 \square \square 6 \\ - 3 \ 5 \ 8 \ \square \\ \hline 8 \ 6 \ 9 \end{array} \quad \begin{array}{r} \text{(b)} \quad 8 \square 4 \square 7 \\ - 6 \ 3 \ 8 \ \square \\ \hline 7 \ 9 \ 0 \ 7 \ 5 \end{array} \right\} ?$$

**Copy and complete the subtractions  
and replace them by the missing  
digit to make the calculations correct**

2. A tourist on mountain Rwenzori recorded the temperature as 12°C the evening of Easter Sunday. At midnight the temperature was -5°C. By how many degrees had the temperature fallen? (4 marks)
3. Given a set of numbers {1,2,3,4,5,6,7,8,9,10} workout the sum of the first five composite numbers. (4 marks)
4. In a certain test a correct answer scores 3marks and an incorrect answer, the child gets a penalty of two marks deducted. Joy guessed all the answers. She got 6 correct and 4 wrong. Work out her total marks. (4 marks)
5. A shopkeeper sells candles in packets of 12 and candle stands in packets of 8. What is the least number of candles and candle stands Nita should buy so that there will be one candle for each candle stand. (4 marks)
6. Isaac was given the following Uganda bank notes, write the grand total of the notes in words.(clearly show your working)



7. A monkey sat on the limb of a tree that was 16 meters above the ground. It swung up by 9 meters above and climbed 10 meters more, and then jumped down 14 meters. How far from the ground is the monkey. (4 marks)

8. Convert  $324_{\text{five}}$  to ternary base. (4 marks)

## SECTION B

### 9. Situation of Integration

A community is hit by famine and the government decides to give each member in the household a potato to solve their problem of hunger.

**Support:** Each package contains an equal number of potatoes of five.

There are 10 households in the community with 3, 5, 7, 4, 6, 5, 8, 12, 13 members respectively.

**Resources:** Knowledge of Bases, knowledge of mathematical operations

**Task:** Determine the number of packages of potatoes the government will take to that community. In case there are remaining potatoes, discuss what the government should do with them. (10 marks)

### 10. Situation of Integration

Once upon a time, there lived an old woman. She had hot and cold stones and a big pot of water. If she put one hot stone in the water, the temperature of the water would rise by 1 degree. If she took the hot stone out of the water again, the temperature would go down by 1 degree.

**Task:**

- If the temperature of the water is 24 degrees and the old woman adds 5 hot stones, what is the new temperature of the water?
- What is the temperature of the water when the old woman removes 3 hot stones? Explain your answer. (10 marks)

**END**