



UGANDA NATIONAL EXAMINATIONS BOARD
CONTINUOUS ASSESSMENT OBSERVATION CHECKLIST
456 MATHEMATICS
Senior 3, Term 3

Centre/CA No: **Year:**

Learner's Name: **Learner ID:**

Instructions to the facilitator:

1. This observation checklist contains **one** competency, which **must** be assessed by the end of this term.
2. Please **tick** against the indicator(s) the learner has exhibited at every level assessed.
3. Record the **number of indicators observed** in the boxes provided at the end of each level for **Subject Competency (SC)** and **Generic Skill (GS)**.
4. Indicate **N/A** if the learner has not been assessed for a particular level(s).

Theme:

Patterns and algebra.

Topic:

Quadratic equations.

Learning Outcome(s):

1. Determine the roots of the quadratic equation using factorisation, completing the square and the formula.

2. Make a table of values for a quadratic function and draw the graph.

3. Solve simultaneous equations involving one quadratic equation and a linear equation.

Subject Competency (SC):

Uses quadratic equations to solve real-life problems.

Generic Skill (GS):

Creativity and innovation.

Learning Domain:

Psychomotor.

Level 1: Imitation

Subject Competency (SC): Imitating the teacher/peer/video clip, etc., using quadratic equations to solve real-life problems, the learner:

- ☐ Identifies mathematical concepts involved in solving quadratic equations.
- ☐ Simplifies the equation

- ☐ Determines roots.
- ☐ Makes a decision.

Generic Skill (GS): Imitating the teacher/peer/video clip, etc., demonstrating creativity and innovation while using quadratic equations to solve real-life problems, the learner:

- ☐ Uses imaginations to explore possibilities.
- ☐ Works with others to generate ideas.
- ☐ Suggests and develops new solutions.
- ☐ Tries out innovative alternatives.
- ☐ Looks for patterns and makes generalisations.

Level 1 Indicators	
SC	GS

Level 2: Manipulation

Subject Competency (SC): Following instructions from the teacher/peer/video clip/laboratory technician, etc., using quadratic equations to solve real-life problems, the learner:

- ☐ Identifies mathematical concepts involved in solving quadratic equations.
- ☐ Simplifies the equation.
- ☐ Determines roots.
- ☐ Makes a decision.

Generic Skill (GS): Following instructions from the teacher/peer/video clip, etc., demonstrating creativity and innovation when using quadratic equations to solve real-life problems, the learner:

- ☐ Uses imaginations to explore possibilities.
- ☐ Works with others to generate ideas.
- ☐ Suggests and develops new solutions.
- ☐ Tries out innovative alternatives.
- ☐ Looks for patterns and makes generalisations.

Level 2 Indicators	
SC	GS

Level 3: Precision

Subject Competency (SC): Using quadratic equations to solve real-life problems, independently but with minimal errors, the learner:

- ☐ Identifies mathematical concepts involved in solving quadratic equations.
- ☐ Simplifies the equation.
- ☐ Determines roots.
- ☐ Makes a decision.

Generic Skill (GS): Demonstrating creativity and innovation independently, in using quadratic equations to solve real-life problems, the learner:

- ☐ Uses imaginations to explore possibilities.
- ☐ Works with others to generate ideas.
- ☐ Suggests and develops new solutions.
- ☐ Tries out innovative alternatives.
- ☐ Looks for patterns and makes generalisations.

Level 3 Indicators	
SC	GS

Level 4: Articulation

Subject Competency (SC): Using quadratic equations to solve real-life problems correctly and innovatively, the learner:

- ☐ Identifies mathematical concepts involved in solving quadratic equations.
- ☐ Simplifies the equation.
- ☐ Determines roots.
- ☐ Makes a decision.

Generic Skill (GS): Demonstrating creativity and innovation in using quadratic equations to solve real-life problems, the learner:

- ☐ Uses imaginations to explore possibilities.
- ☐ Works with others to generate ideas.
- ☐ Suggests and develops new solutions.
- ☐ Tries out innovative alternatives.
- ☐ Looks for patterns and makes generalisations.

Level 4 Indicators	
SC	GS

Level 5: Naturalisation

Subject Competency (SC): Using quadratic equations to solve real-life problems, with ease, the learner:

- ☐ Identifies mathematical concept involved in solving quadratic equations.
- ☐ Simplifies the equation.
- ☐ Determines roots.
- ☐ Makes a decision.

Generic Skill (GS): Demonstrating creativity and innovation in using quadratic equations to solve real-life problems, with ease, the learner:

- ☐ Uses imaginations to explore possibilities.
- ☐ Works with others to generate ideas.
- ☐ Suggests and develops new solutions.
- ☐ Tries out innovative alternatives.
- ☐ Looks for patterns and makes generalisations.

Level 5 Indicators	
SC	GS