

REPUBLIC OF KENYA
MINISTRY OF EDUCATION

COMPETENCY-BASED CURRICULUM (CBC)

GRADE 9 MATHEMATICS
TERM 2 LESSON PLANS

2026 (Rationalised CBC)

— PREVIEW —

This is a 2-lesson preview. The full pack contains 47 lesson plans.

Buy the full pack at cbcedukenya.com — KES 300

TEACHER'S NAME	_____
SCHOOL	_____
GRADE	9
TERM	Term 2
YEAR	2026

REFERENCE MATERIALS

1. Mathematics Grade 9 Curriculum Design (KICD)
2. KLB / Longhorn / Mountain Top Mathematics Grade 9 Learner's Book
3. Mathematics Grade 9 Teacher's Guide
4. KNEC KJSEA Assessment Framework 2026

CBC Edu Kenya · cbcedukenya.com

Aligned with KICD Curriculum Designs · Editable Word Document

Not an official MoE/KICD publication

CBC Edu Kenya · cbcedukenya.com · Aligned with KICD Curriculum Designs

SECTION A: DETAILED LESSON PLANS

The following lesson plans provide a detailed guide for selected lessons across Term 2. All plans follow the rationalised CBC format aligned with the KICD curriculum design for GRADE 9 MATHEMATICS.

LESSON PLAN — WEEK 1, LESSON 1

Strand: **ALGEBRA** | Sub-Strand: **Linear Equations**

SCHOOL	_____
LEARNING AREA	Mathematics
GRADE	9
TERM	2
WEEK / LESSON	Week 1 Lesson 1
STRAND	ALGEBRA
SUB-STRAND	Linear Equations
SPECIFIC LEARNING OUTCOMES	By the end of the lesson, the learner should be able to: a) Solve linear equations in one variable b) Apply to word problems c) Build algebraic reasoning
KEY INQUIRY QUESTION(S)	How do we find an unknown value?
CORE COMPETENCY	Mathematical Reasoning; Critical Thinking; Self-Efficacy
VALUES	Accuracy, Patience, Perseverance
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Financial Literacy
LEARNING RESOURCES	Curriculum design, learner's book, exercise book

ORGANISATION OF LEARNING

INTRODUCTION	(5 min) Greet the learners warmly and settle them. Briefly recap the previous lesson by asking one or two learners to share something they remember. Introduce today's focus on Linear Equations by writing the key inquiry question on the board: "How do we find an unknown value?". Allow two to three learners to give quick answers — accept all responses without correcting yet. Tell learners that by the end of the lesson they will be able to solve linear equations in one variable. Display the resources for the lesson (Curriculum design, learner's book, exercise book) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Worked examples. Hold up the relevant resource or write the key term on the board. Ask learners what they already know about it. Note 3-4 learner ideas on the board — these become anchors for the lesson. Link learners' ideas to the SLO: "Solve linear equations in one variable". Manage the class actively — walk to the back of the room, call on learners by name, and keep the pace brisk so no one drifts.
STEP 2	(8 min) Direct teach with a worked example. Pair drill. Demonstrate one full example on the board, thinking aloud as you go: name the step, do the step, check the step. Pause halfway and ask the class to predict the next step before you reveal it — this is your formative check. Re-state the inquiry

	question "How do we find an unknown value?" and answer it now using the example you just completed. Connect explicitly to the SLO: "Apply to word problems". Invite one or two volunteers to come up and try the next example with you guiding — give immediate corrective feedback.
STEP 3	(8 min) Guided practice in pairs or small groups. Word problem practice. Distribute the practice task and put learners in pairs of mixed ability. Set a clear time limit (5 minutes for the task, 2 minutes for sharing). Walk around the room and listen in — pick up two pairs whose work is going well and one pair that is stuck. Differentiate as you go: for fast finishers, add a stretch question (e.g. "now try a harder example"); for learners who are stuck, scaffold by working through the first step together. Keep a low murmur in the room — silence usually means confusion, loud chatter usually means off-task.
STEP 4	(7 min) Independent application and formative assessment. apply Linear Equations independently in a short task. Set a short individual task that mirrors the worked example but with different numbers, names, or context. While learners work, circulate and tick exercise books for two things only: did the learner attempt the task, and did they get the core idea right. This gives you a quick read on the class. After 5 minutes, call time and ask three learners to share their answers — choose one strong, one developing, and one who needs support. Affirm progress on the SLO: "Build algebraic reasoning".
CONCLUSION	(5 min) Recap and exit ticket. Ask the whole class three quick questions to verify learning: (1) What is one new word or idea you learned today about Linear Equations? (2) How would you answer "How do we find an unknown value?" in one sentence? (3) Where could you use this learning outside the classroom? Take answers from different learners — including the quieter ones. Close by reminding learners of the values for the lesson and previewing the next lesson briefly. Affirm specific learners by name for effort, accuracy, or helpfulness during the lesson.
EXTENDED ACTIVITIES	Set a short, concrete task for home: ask learners to find one example of Linear Equations in their environment (in the home, market, neighbourhood, or community) and bring evidence to the next lesson — a sketch, a written description, or a photograph if available. Fast finishers in class can begin this task immediately as enrichment. Encourage learners to discuss the lesson with a parent, sibling, or guardian — this strengthens learning at home and invites family involvement, which is a core CBC principle.
REFLECTION ON THE LESSON	_____

LESSON PLAN — WEEK 1, LESSON 2

Strand: **ALGEBRA** | Sub-Strand: **Linear Equations**

SCHOOL	_____
LEARNING AREA	Mathematics
GRADE	9
TERM	2
WEEK / LESSON	Week 1 Lesson 2
STRAND	ALGEBRA
SUB-STRAND	Linear Equations
SPECIFIC LEARNING OUTCOMES	By the end of the lesson, the learner should be able to: a) Solve equations with brackets b) Solve equations with fractions c) Build technique
KEY INQUIRY QUESTION(S)	How do we handle brackets and fractions?
CORE COMPETENCY	Mathematical Reasoning; Critical Thinking; Self-Efficacy
VALUES	Accuracy, Patience, Perseverance
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Financial Literacy
LEARNING RESOURCES	Learner's book, board

ORGANISATION OF LEARNING

INTRODUCTION	(5 min) Greet the learners warmly and settle them. Briefly recap the previous lesson by asking one or two learners to share something they remember. Introduce today's focus on Linear Equations by writing the key inquiry question on the board: "How do we handle brackets and fractions?". Allow two to three learners to give quick answers — accept all responses without correcting yet. Tell learners that by the end of the lesson they will be able to solve equations with brackets. Display the resources for the lesson (Learner's book, board) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Step-by-step worked examples. Hold up the relevant resource or write the key term on the board. Ask learners what they already know about it. Note 3-4 learner ideas on the board — these become anchors for the lesson. Link learners' ideas to the SLO: "Solve equations with brackets". Manage the class actively — walk to the back of the room, call on learners by name, and keep the pace brisk so no one drifts.
STEP 2	(8 min) Direct teach with a worked example. Pair work. Demonstrate one full example on the board, thinking aloud as you go: name the step, do the step, check the step. Pause halfway and ask the class to predict the next step before you reveal it — this is your formative check. Re-state the inquiry question "How do we handle brackets and fractions?" and answer it now using the example you just completed. Connect explicitly to the SLO: "Solve equations with fractions". Invite one or two volunteers to come up and try the next example with you guiding — give immediate corrective feedback.

STEP 3	(8 min) Guided practice in pairs or small groups. Class discussion. Distribute the practice task and put learners in pairs of mixed ability. Set a clear time limit (5 minutes for the task, 2 minutes for sharing). Walk around the room and listen in — pick up two pairs whose work is going well and one pair that is stuck. Differentiate as you go: for fast finishers, add a stretch question (e.g. "now try a harder example"); for learners who are stuck, scaffold by working through the first step together. Keep a low murmur in the room — silence usually means confusion, loud chatter usually means off-task.
STEP 4	(7 min) Independent application and formative assessment. apply Linear Equations independently in a short task. Set a short individual task that mirrors the worked example but with different numbers, names, or context. While learners work, circulate and tick exercise books for two things only: did the learner attempt the task, and did they get the core idea right. This gives you a quick read on the class. After 5 minutes, call time and ask three learners to share their answers — choose one strong, one developing, and one who needs support. Affirm progress on the SLO: "Build technique".
CONCLUSION	(5 min) Recap and exit ticket. Ask the whole class three quick questions to verify learning: (1) What is one new word or idea you learned today about Linear Equations? (2) How would you answer "How do we handle brackets and fractions?" in one sentence? (3) Where could you use this learning outside the classroom? Take answers from different learners — including the quieter ones. Close by reminding learners of the values for the lesson and previewing the next lesson briefly. Affirm specific learners by name for effort, accuracy, or helpfulness during the lesson.
EXTENDED ACTIVITIES	Set a short, concrete task for home: ask learners to find one example of Linear Equations in their environment (in the home, market, neighbourhood, or community) and bring evidence to the next lesson — a sketch, a written description, or a photograph if available. Fast finishers in class can begin this task immediately as enrichment. Encourage learners to discuss the lesson with a parent, sibling, or guardian — this strengthens learning at home and invites family involvement, which is a core CBC principle.
REFLECTION ON THE LESSON	_____

— END OF PREVIEW —

You have viewed 2 of 47 fully-detailed lesson plans. The complete pack covers every week of Term 2 (47 lessons) plus the full Scheme of Work.

Buy the full pack — only KES 300

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SECTION B: SCHEME OF WORK — GRADE 9 MATHEMATICS TERM 2

School: _____ Teacher: _____ Year: 2026

WK	LSN	STRAND	SUB-STRAND	SPECIFIC LEARNING OUTCOMES	KEY INQUIRY QUESTION(S)	LEARNING EXPERIENCES	LEARNING RESOURCES	ASSESSMENT METHODS
1	1	Algebra	Linear Equations	a) Solve linear equations in one variable b) Apply to word problems c) Build algebraic reasoning	How do we find an unknown value?	Worked examples; pair drill; word problem practice	Curriculum design, learner's book, exercise book	Written, oral, observation
1	2	Algebra	Linear Equations	a) Solve equations with brackets b) Solve equations with fractions c) Build technique	How do we handle brackets and fractions?	Step-by-step worked examples; pair work; class discussion	Learner's book, board	Written, peer
1	3	Algebra	Linear Equations Word Problems	a) Translate problems into equations b) Solve and check c) Apply maths to life	How do we turn words into equations?	Read problems together; identify unknowns; solve; verify	Learner's book, problem cards	Written, oral
1	4	Algebra	Linear Inequalities	a) Solve linear inequalities b) Represent on number line c) Build inequality reasoning	How do inequalities differ from equations?	Compare with equations; solve; sketch on number line	Number line, learner's book	Written, observation
2	1	Algebra	Compound Inequalities	a) Solve compound inequalities b) Represent solutions c) Build complex reasoning	How do we handle two inequalities together?	Worked examples; pair drill; sketch solutions	Number line, exercise book	Written, peer
2	2	Algebra	Inequalities Word Problems	a) Translate word problems into inequalities b) Solve c) Apply	When do we use inequalities in real life?	Real-world contexts (budget, capacity); pair solve	Problem cards, learner's book	Written, oral
2	3	Algebra	Quadratic Expressions	a) Identify quadratic expressions b) Expand simple quadratics c) Build algebraic skills	What does a quadratic expression look like?	Identify; expand using distributive property; pair drill	Learner's book, board	Written, oral
2	4	Algebra	Factorising Quadratics	a) Factorise simple quadratics b) Use grouping c) Build factorisation skills	How do we factorise $x^2 + 5x + 6$?	Worked examples; product/sum method; pair drill	Learner's book, worksheet	Written, peer
3	1	Algebra	Solving Quadratics by Factorisation	a) Solve $x^2 + 5x + 6 = 0$ b) Verify solutions c) Build technique	How do we use factorisation to solve?	Set = 0; factorise; solve each factor; verify	Learner's book, exercise book	Written, oral
3	2	Algebra	Quadratic Word Problems	a) Translate problems into quadratics b) Solve c) Interpret answer	How do we use quadratics in real situations?	Read problems; identify; solve; check practical sense	Problem cards, learner's book	Written, peer
3	3	Geometry	Angles in Polygons	a) State sum of interior angles b) Calculate	How do we find the sum of	Formula $(n-2) \times 180^\circ$; worked examples; pair	Geometry set, learner's	Written, observation

				missing angles c) Build geometric reasoning	angles in a polygon?	drill	book, charts	
3	4	Geometry	Exterior Angles	a) State sum of exterior angles b) Calculate exterior angles c) Apply	What is the sum of exterior angles?	Demonstrate (always 360°); worked examples; pair drill	Polygon shapes, charts	Written, oral
4	1	Geometry	Properties of Triangles	a) State angle sum (180°) b) Identify exterior angle property c) Apply to problems	How do triangle angles relate?	Demonstrate; worked examples; problem solving	Triangles, geometry set, board	Written, observation
4	2	Geometry	Pythagoras Theorem	a) State theorem ($a^2+b^2=c^2$) b) Apply to find missing side c) Verify with examples	How do we find the missing side of a right triangle?	Demonstrate; worked examples; pair drill	Right triangles, calculator, learner's book	Written, oral
4	3	Geometry	Pythagoras Applications	a) Apply Pythagoras in real-world problems b) Solve word problems c) Connect to life	How do builders use Pythagoras?	Discuss real applications (ladders, ramps); solve problems	Problem cards, calculator	Written, peer
4	4	Geometry	Trigonometry Introduction	a) Identify sin, cos, tan ratios b) State definitions c) Build trig foundation	What are the three trigonometric ratios?	Define using right triangle; SOH-CAH-TOA mnemonic; pair recall	Geometry set, calculator, charts	Written, oral
5	1	Geometry	Using Trigonometric Ratios	a) Use sin, cos, tan to find angles b) Use to find sides c) Apply ratios	How do we find an unknown angle or side?	Worked examples; calculator drill; pair work	Calculator, learner's book	Written, peer
5	2	Geometry	Trig Word Problems	a) Apply trig to height/distance problems b) Solve angle of elevation/depression c) Connect to life	How do surveyors measure tall buildings?	Discuss applications; angle of elevation; pair solve	Problem cards, calculator	Written, oral
5	3	Geometry	Circles — Definitions	a) Define radius, diameter, chord, arc b) Sketch and label c) Build vocabulary	What are the parts of a circle?	Sketch large circle; label parts; pair quiz	Compass, learner's book, charts	Written, observation
5	4	Geometry	Circle Theorems	a) State angle subtended at centre = 2× at circumference b) State angle in semicircle = 90° c) Apply	What special angles does a circle have?	Demonstrate theorem; worked examples; pair drill	Geometry set, learner's book	Written, oral
6	1	Statistics	Data Collection	a) Collect data using questionnaires b) Use observation c) Build research skills	How do we collect useful data?	Design simple questionnaire; conduct mini-survey; share	Questionnaire templates, paper	Observation, written
6	2	Statistics	Frequency Tables	a) Organise data in frequency tables b) Calculate frequencies c) Build organisation	How do we organise raw data?	Worked examples; tally marks; pair drill	Sample data, exercise book	Written, peer
6	3	Statistics	Measures of Central	a) Calculate mean b) Find median c) Find mode	What is the "average"? How	Define each; worked examples; pair drill	Sample data, calculator	Written, oral

			Tendency		many kinds?			
6	4	Statistics	Choosing the Right Average	a) Compare mean, median, mode b) Choose appropriate measure c) Build judgement	When is the median better than the mean?	Discuss outliers; pair analyse; class discussion	Sample data, problem cards	Oral, written
7	1	Statistics	Bar Graphs	a) Draw bar graphs from data b) Read and interpret c) Build graphical skills	How do we visualise data?	Worked example; pair construct; interpret	Graph paper, ruler, pencil, data	Written, observation
7	2	Statistics	Pie Charts	a) Calculate sectors for pie chart b) Draw and label c) Build representation	How do we show parts of a whole?	Calculate angles ($\times 360$); draw with compass; pair share	Compass, protractor, graph paper	Written, peer
7	3	Statistics	Line Graphs	a) Plot line graphs from time-series data b) Interpret trends c) Build analysis	How do we show change over time?	Plot data on axes; read trends; pair interpret	Graph paper, ruler	Written, oral
7	4	Statistics	Comparing Graphs	a) Choose appropriate graph type b) Compare strengths c) Build judgement	Which graph for which data?	Discuss strengths; pair classify scenarios	Sample graphs, scenarios	Oral, written
8	1	Probability	Introduction to Probability	a) Define probability b) State range (0 to 1) c) Build foundation	What is probability?	Define; identify experiments; pair share examples	Coin, dice, learner's book	Oral, observation
8	2	Probability	Calculating Probability	a) Calculate $P(\text{event}) = \text{favourable}/\text{total}$ b) Apply to coins, dice c) Build calculation	How do we calculate probability?	Worked examples (coin, dice); pair drill	Coin, dice, exercise book	Written, peer
8	3	Probability	Probability Word Problems	a) Solve probability problems b) Interpret context c) Apply to life	How do we use probability daily?	Discuss real applications (weather, sports); pair solve	Problem cards, calculator	Written, oral
8	4	Probability	Independent Events	a) Identify independent events b) Calculate combined probability c) Apply rule	What are independent events?	Define; worked examples (two dice); pair drill	Two dice, learner's book	Written, peer
9	1	Mensuration	Surface Area of Cuboids	a) Calculate SA of cuboid b) Apply formula c) Build mensuration skills	How do we find the surface area of a box?	Demonstrate net; calculate SA; pair drill	Cuboid models, calculator	Written, observation
9	2	Mensuration	Surface Area of Cylinders	a) Calculate SA of cylinder b) Apply formula c) Build technique	What is the surface area of a tin?	Demonstrate; formula $2\pi r(r+h)$; pair drill	Cylinder models, calculator	Written, peer
9	3	Mensuration	Volume of Cuboids and Cylinders	a) Calculate volume b) Apply to real containers c) Connect to life	How much will the tank hold?	Worked examples; real containers; pair calculate	Models, calculator, problem cards	Written, oral
9	4	Mensuration	Mixed Volume Problems	a) Solve combined-shape volume problems b) Apply formulae c) Build problem	How do we handle complex shapes?	Decompose into simple shapes; pair solve	Problem cards, calculator	Written, peer

				solving				
10	1	Numbers	Indices	a) State laws of indices b) Apply to simplify c) Build algebraic technique	How do exponents work?	Worked examples ($a^m \times a^n = a^{(m+n)}$); pair drill	Learner's book, exercise book	Written, oral
10	2	Numbers	Standard Form	a) Express numbers in standard form b) Convert to/from c) Apply to large/small numbers	How do we write very large and very small numbers?	Worked examples; calculator practice; pair share	Calculator, learner's book	Written, observation
10	3	Numbers	Logarithms — Introduction	a) Define logarithm b) Convert between exponent and log c) Build foundation	What is a logarithm?	Connect to indices; worked examples; pair quiz	Calculator, learner's book	Written, oral
10	4	Numbers	Logarithm Tables	a) Use log tables / calculator b) Apply to multiplication c) Build practical skill	How do we use logs to multiply?	Demonstrate calculator; pair drill; worked example	Calculator, log tables	Written, peer
11	1	KJSEA Revision	Algebra Practice	a) Recap linear, quadratic equations b) Apply to mixed problems c) Build exam readiness	Am I ready for KJSEA algebra?	Mixed practice problems; timed drill; mark together	KJSEA-style papers, calculator	Written, oral
11	2	KJSEA Revision	Geometry Practice	a) Recap angles, Pythagoras, trig, circles b) Solve mixed c) Build readiness	Am I ready for KJSEA geometry?	Mixed problems; pair solve; mark together	Past papers, geometry set	Written, peer
11	3	KJSEA Revision	Statistics & Probability Practice	a) Recap data, graphs, probability b) Solve mixed c) Build readiness	Am I ready for stats and probability?	Mixed problems; pair solve; class discussion	Past papers, calculator	Written, oral
11	4	KJSEA Revision	Mensuration Practice	a) Recap area, volume, surface area b) Solve mixed c) Build readiness	Am I ready for mensuration?	Mixed problems; pair solve; mark together	Past papers, calculator	Written, peer
12	1	KJSEA Revision	Mock Paper 1	a) Sit a mock exam b) Manage time c) Build exam stamina	Can I complete a paper in time?	Sit timed mock; mark together; identify weak areas	Mock paper, calculator, watch	Written, self-assessment
12	2	KJSEA Revision	Mock Paper 2	a) Sit second mock b) Improve from feedback c) Build confidence	Did I improve?	Second mock; mark; compare with Mock 1; reflect	Mock paper, calculator	Written, self-assessment
12	3	KJSEA Revision	Final Reflection	a) Identify strongest topics b) Identify weak topics for Term 3 c) Plan revision	What should I focus on?	Personal reflection; pair share; goal setting	Reflection sheet, exercise book	Self-assessment, peer

