IXL Skill Plan for the Dynamic Learning Maps® Essential Elements

Algebra 1

Use IXL's interactive skill plan to get up-to-date skill alignments, assign skills to your students, and track progress.

www.ixl.com/math/skill-plans/dynamic-learning-maps-essential-elements-algebra-1

Number and Quantity

N.RN: The Real Number System

Standard	IXL skills
Extend the properties of exponents to rational exponents.	
M.EE.N.RN.1: Determine the value of a quantity that is squared or cubed.	1. Identify square numbers 54P 2. Evaluate powers: squares and cubes TWD

N.Q: Quantities

Standard	IXL skills
Reason quantitatively, and use units to solve problems.	
M.EE.N.Q.1–3: Express quantities to the appropriate precision of measurement.	**Rounding** 1. Round decimals R5J 2. Round money amounts X9R **Estimation** 3. Estimate sums and differences of decimals 2GK 4. Estimate products of whole numbers and decimals Q6D 5. Estimate products of decimals V9E

Algebra

A.SSE: Seeing Structure in Expressions

Standard	IXL skills
Interpret the structure of expressions.	
M.EE.A.SSE.1: Identify an algebraic expression involving one arithmetic operation to represent a real-world problem.	1. Write variable expressions: word problems 8UK 2. Choose one-step equations: word problems 5A4
Write expressions in equivalent forms to solve problems.	
M.EE.A.SSE.3: Solve simple algebraic equations with one variable using multiplication and division.	1. Model and solve multiplication equations using algebra tiles GB6 2. Solve one-step multiplication and division equations with whole numbers JUA
M.EE.A.SSE.4: Determine the successive term in a geometric sequence given the common ratio.	1. Geometric sequences XY9

A.CED: Creating Equations

Standard	IXL skills
Create equations that describe numbers or relationships.	
M.EE.A.CED.1: Create an equation involving one operation with one variable, and use it to solve a real-world problem.	1. Write and solve one-step equations using strip diagrams: word problems Y7E 2. Solve one-step equations: word problems K5U
M.EE.A.CED.2–4: Solve one-step inequalities.	**Understand inequalities** 1. Solutions to inequalities P9N 2. Graph inequalities on number lines 6VS 3. Write inequalities from number lines CKJ **Solve and graph inequalities** 4. Solve and graph one-step addition and subtraction inequalities DW6

Visit IXL's interactive skill plan at www.ixl.com/math/skill-plans/dynamic-learning-maps-essential-elements-algebra-1

5. Solve and graph one-step multiplication and division inequalities with positive numbers LTV
6. Solve one-step inequalities DTU
7. Graph solutions to one-step inequalities PPC

A.REI: Reasoning with Equations and Inequalities

Standard	IXL skills
Represent and solve equations and inequalities graphically.	
M.EE.A.REI.10–12: Interpret the meaning of a point on the graph of a line.	1. Interpret graphs of proportional relationships Q96 2. Evaluate a linear function from its graph: word problems STU

Functions

F.IF: Interpreting Functions

Standard	IXL skills
Understand the concept of a function, and use function notation.	
M.EE.F.IF.1–3: Use the concept of function to solve problems.	1. Analyze graphed relationships SMY 2. Evaluate two-variable equations: word problems YJT 3. Evaluate a linear function from its graph: word problems STU 4. Write an equation from a scenario using a table 5UT 5. Write an equation from a graph using a table BCZ
Interpret functions that arise in applications in terms of the context.	
M.EE.F.IF.4–6: Construct graphs that represent linear functions with different rates of change and interpret which is faster/slower, higher/lower, etc.	**Construct graphs** 1. Use an equation to complete a table and a graph KY9 2. Complete a table and make a graph A77 3. Graph a line using a positive slope 8PU **Compare rates of change** 4. Compare rates of change 53P

F.BF: Building Functions

Standard	IXL skills
Build a function that models a relationship between two quantities.	
M.EE.F.BF.1: Select the appropriate graphical representation (first quadrant) given a situation involving constant rate of change.	1. Graph a proportional relationship: word problems FJW 2. Complete a table and make a graph: word problems JFK

Visit IXL's interactive skill plan at www.ixl.com/math/skill-plans/dynamic-learning-maps-essential-elements-algebra-1

M.EE.F.BF.2: Determine an arithmetic sequence with whole numbers when provided a recursive rule.	1. Arithmetic sequences WX5

F.LE: Linear, Quadratic, and Exponential Models

Standard	IXL skills
Construct and compare linear, quadratic, and exponential models, and solve problems.	
M.EE.F.LE.1–3: Model a simple linear function such as $y = mx$ to show that these functions increase by equal amounts over equal intervals.	1. Find the constant of proportionality from tables and graphs WPT 2. Graph proportional relationships and find the slope MQD 3. Rate of change of a linear function: graphs 37K 4. Rate of change of a linear function: tables NQE

Statistics and Probability

S.ID: Interpreting Categorical and Quantitative Data

Standard	IXL skills
Summarize, represent, and interpret data on a single count or measurement variable.	
M.EE.S.ID.1–2: Given data, construct a simple graph (line, pie, bar, or picture) or table, and interpret the data.	**Line graphs** 1. Create line graphs VCP 2. Interpret line graphs X5J **Circle graphs** 3. Interpret circle graphs DNA **Bar graphs** 4. Create bar graphs J8V 5. Interpret bar graphs UQA **Picture graphs** 6. Create picture graphs EMX 7. Interpret picture graphs X5L **Tables** 8. Interpret tables LVG
M.EE.S.ID.3: Interpret general trends on a graph or chart.	1. Describe shapes of distributions in line plots K6Y
M.EE.S.ID.4: Calculate the mean of a given data set (limit the number of data points to fewer than five).	1. Find the mean Y9L