



IXL Skill Alignment

Alg 1 alignment for HMH Texas

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Module 1

Quantitative Reasoning

Textbook section	IXL skills	
1.1: Solving Equations	J.3	Solve one-step linear equations >>
	J.4	Solve two-step linear equations >>
1.2: Modeling Quantities	C.7	Scale drawings: word problems >>
	E.1	Convert rates and measurements: customary units >>
1.3: Reporting with Precision and Accuracy	E.4	Precision >>

Module 2

Algebraic Models

Textbook section	IXL skills
2.1: Modeling with Expressions	I.1 Write variable expressions >>
	I.3 Identify equivalent linear expressions >>
2.2: Creating and Solving Equations	I.4 Write variable equations >>
	J.5 Solve advanced linear equations >>
	J.6 Solve equations with variables on both sides >>
	J.10 Solve linear equations: word problems >>
2.3: Solving for a Variable	I.8 Rearrange multi-variable equations >>
2.4: Creating and Solving Inequalities	K.8 Solve two-step linear inequalities >>
	K.10 Solve advanced linear inequalities >>

Module 3

Functions and Models

Textbook section	IXL skills
3.1: Graphing Relationships	
3.2: Understanding Relations and Functions	Q.1 Relations: convert between tables, graphs, mappings, and lists of points >>
	Q.2 Domain and range of relations >>
	Q.4 Identify functions >>
	Q.5 Identify functions: vertical line test >>
3.3: Modeling with Functions	Q.3 Identify independent and dependent variables >>
3.4: Graphing Functions	Q.7 Evaluate a function >>
	Q.9 Complete a function table from a graph >>
	Q.10 Complete a function table from an equation >>

Module 4

Patterns and Sequences

Textbook section	IXL skills
4.1: Identifying and Graphing Sequences	P.4 Evaluate variable expressions for number sequences >>
4.2: Constructing Arithmetic Sequences	P.2 Arithmetic sequences >>
	P.5 Write variable expressions for arithmetic sequences >>
4.3: Modeling with Arithmetic Sequences	

Module 5

Linear Functions

Textbook section	IXL skills
5.1: Understanding Linear Functions	S.13 Complete a table and graph a linear function >>
	S.17 Standard form: graph an equation >>
5.2: Using Intercepts	S.16 Standard form: find x- and y-intercepts >>
5.3: Interpreting Rate of Change and Slope	S.2 Find the slope of a graph >>
	S.3 Find the slope from two points >>
5.4: Direct Variation	R.4 Write direct variation equations >>
	R.5 Write and solve direct variation equations >>

Module 6

Forms of Linear Functions

Textbook section	IXL skills
6.1: Slope-Intercept Form	S.5 Slope-intercept form: find the slope and y-intercept >>
	S.6 Slope-intercept form: graph an equation >>
	S.8 Slope-intercept form: write an equation >>
	S.10 Slope-intercept form: write an equation from a word problem >>
6.2: Point-Slope Form	S.21 Point-slope form: write an equation >>
	S.22 Point-slope form: write an equation from a graph >>
6.3: Standard Form	S.15 Write equations in standard form >>
6.4: Transforming Linear Functions	S.25 Transformations of linear functions >>
6.5: Comparing Properties of Linear Functions	S.14 Compare linear functions: graphs, tables, and equations >>

Module 7

Linear Equations and Inequalities

Textbook section	IXL skills
7.1: Parallel and Perpendicular Lines	S.23 Slopes of parallel and perpendicular lines >>
	S.24 Write an equation for a parallel or perpendicular line >>
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7.2: Using Functions to Solve One-Variable Equations	
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7.3: Linear Inequalities in Two Variables	T.1 Does (x, y) satisfy the inequality? >>
	T.2 Linear inequalities: solve for y >>
	T.3 Graph a two-variable linear inequality >>
	T.4 Linear inequalities: word problems >>

Module 8

Linear Modeling and Regression

Textbook section	IXL skills
8.1: Scatter Plots and Trend Lines	KK.8 Interpret a scatter plot >>
	KK.10 Match correlation coefficients to scatter plots >>
	KK.12 Scatter plots: line of best fit >>
8.2: Fitting a Linear Model to Data	KK.13 Find the equation of a regression line >>
	KK.14 Interpret regression lines >>
	KK.15 Analyze a regression line of a data set >>

Module 9

Solving Systems of Linear Equations

Textbook section	IXL skills	
9.1: Solving Linear Systems by Graphing	U.2	Solve a system of equations by graphing >>
	U.3	Solve a system of equations by graphing: word problems >>
	U.4	Find the number of solutions to a system of equations by graphing >>
	U.6	Classify a system of equations by graphing >>
9.2: Solving Linear Systems by Substitution	U.8	Solve a system of equations using substitution >>
	U.9	Solve a system of equations using substitution: word problems >>
9.3: Solving Linear Systems by Adding or Subtracting		
9.4: Solving Linear Systems by Multiplying First	U.10	Solve a system of equations using elimination >>
	U.11	Solve a system of equations using elimination: word problems >>

Module 10

Modeling with Linear Systems

Textbook section	IXL skills	
10.1: Creating Systems of Linear Equations		
10.2: Graphing Systems of Linear Inequalities	T.5	Is (x, y) a solution to the system of inequalities? >>
	T.6	Solve systems of linear inequalities by graphing >>
10.3: Modeling with Linear Systems	U.15	Solve a system of equations using any method: word problems >>

Module 11

Rational Exponents and Radicals

Textbook section	IXL skills	
11.1: Understanding Rational Exponents and Radicals	V.10	Evaluate integers raised to rational exponents >>
11.2: Simplifying Expressions with Rational Exponents and Radicals	EE.1	Simplify radical expressions >>
	EE.2	Simplify radical expressions with variables >>

Module 12

Geometric Sequences and Exponential Functions

Textbook section	IXL skills	
12.1: Understanding Geometric Sequences	P.3	Geometric sequences >>
12.2: Constructing Geometric Sequences	P.6	Write variable expressions for geometric sequences >>
12.3: Constructing Exponential Functions	X.1	Evaluate an exponential function >>
12.4: Graphing Exponential Functions		

Module 13

Exponential Equations and Models

Textbook section	IXL skills
13.1: Using Graphs and Properties to Solve Equations with Exponents	
13.2: Modeling Exponential Growth and Decay	X.5 Exponential growth and decay: word problems >>
13.3: Using Exponential Regression Models	
13.4: Comparing Linear and Exponential Models	

Module 14

Adding and Subtracting Polynomials

Textbook section	IXL skills	
14.1: Understanding Polynomial Expressions	Y.1	Identify monomials >>
	Z.1	Polynomial vocabulary >>
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14.2: Adding Polynomial Expressions		
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14.3: Subtracting Polynomial Expressions	Z.3	Add and subtract polynomials using algebra tiles >>
	Z.4	Add and subtract polynomials >>

Module 15

Multiplying and Dividing Polynomials

Textbook section	IXL skills	
15.1: Multiplying Polynomial Expressions by Monomials	Z.6	Multiply a polynomial by a monomial >>
15.2: Multiplying Polynomial Expressions	Z.7	Multiply two polynomials using algebra tiles >>
	Z.8	Multiply two binomials >>
15.3: Special Products of Binomials	Z.9	Multiply two binomials: special cases >>
	Z.10	Multiply polynomials >>
15.4: Dividing Polynomial Expressions	GG.5	Divide polynomials >>

Module 16

Graphing Quadratic Functions

Textbook section	IXL skills	
16.1: Understanding Quadratic Functions		
16.2: Transforming Quadratic Functions	BB.3	Transformations of quadratic functions >>
	BB.4	Graph quadratic functions in vertex form >>
16.3: Interpreting Vertex Form and Standard Form	BB.1	Characteristics of quadratic functions >>

Module 17

Connecting Intercepts, Zeros, and Factors

Textbook section	IXL skills
17.1: Connecting Intercepts and Zeros	
17.2: Connecting Intercepts and Linear Factors	
17.3: Applying the Zero Product Property to Solve Equations	BB.6 Solve a quadratic equation using the zero product property >>

Module 18

Using Factors to Solve Quadratic Equations

Textbook section	IXL skills	
18.1: Solving Equations by Factoring $x^2 + bx + c$	AA.4	Factor quadratics with leading coefficient 1 >>
18.2: Solving Equations by Factoring $ax^2 + bx + c$	AA.3	Factor quadratics using algebra tiles >>
	AA.5	Factor quadratics with other leading coefficients >>
18.3: Using Special Factors to Solve Equations	AA.6	Factor quadratics: special cases >>
	BB.7	Solve a quadratic equation by factoring >>

Module 19

Using Square Roots to Solve Quadratic Equations

Textbook section	IXL skills
19.1: Solving Equations by Taking Square Roots	BB.5 Solve a quadratic equation using square roots >>
19.2: Solving Equations by Completing the Square	BB.8 Complete the square >> BB.9 Solve a quadratic equation by completing the square >>
19.3: Using the Quadratic Formula to Solve Equations	BB.10 Solve a quadratic equation using the quadratic formula >>
19.4: Choosing a Method for Solving Quadratic Equations	

Module 20

Linear, Exponential, and Quadratic Models

Textbook section	IXL skills
20.1: Modeling with Quadratic Functions	
20.2: Comparing Linear, Exponential, and Quadratic Models	CC.1 Identify linear, quadratic, and exponential functions from graphs >> CC.2 Identify linear, quadratic, and exponential functions from tables >>