



IXL Skill Alignment

Integrated 1 alignment for HMH Integrated Math



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Module 1

Quantitative Reasoning

Textbook section	IXL skills
1.1: Solving Equations	<ol style="list-style-type: none">1. Properties of equality H8Q2. Solve one-step linear equations TXJ3. Solve two-step linear equations QAK4. Solve linear equations: word problems UFG
1.2: Modeling Quantities	<ol style="list-style-type: none">1. Solve proportions: word problems 8ES2. Scale drawings: word problems 8B73. Convert rates and measurements: customary units TXC4. Convert rates and measurements: metric units 6W2
1.3: Reporting with Precision and Accuracy	<ol style="list-style-type: none">1. Precision QK92. Minimum and maximum area and volume 4V9

Module 2

Algebraic Models

Textbook section	IXL skills
2.1: Modeling with Expressions	1. Write variable expressions D7K
2.2: Creating and Solving Equations	1. Write variable equations YVW 2. Solve advanced linear equations 28N 3. Solve equations with variables on both sides 7S7 4. Solve equations: complete the solution EVP
2.3: Solving for a Variable	1. Rearrange multi-variable equations WSJ
2.4: Creating and Solving Inequalities	1. Solve two-step linear inequalities NPZ 2. Solve advanced linear inequalities 9K8
2.5: Creating and Solving Compound Inequalities	1. Graph compound inequalities BQX 2. Write compound inequalities from graphs 6UV 3. Solve compound inequalities GXA 4. Graph solutions to compound inequalities LHX

Module 3

Functions and Models

Textbook section	IXL skills
3.1: Graphing Relationships	
3.2: Understanding Relations and Functions	<ol style="list-style-type: none">1. Relations: convert between tables, graphs, mappings, and lists of points RBG2. Domain and range of relations 2CG3. Identify functions VLL4. Identify functions: vertical line test HLX
3.3: Modeling with Functions	<ol style="list-style-type: none">1. Identify independent and dependent variables N552. Evaluate a function R96
3.4: Graphing Functions	<ol style="list-style-type: none">1. Find values using function graphs QCG2. Complete a function table from an equation Z733. Interpret the graph of a function: word problems STU

Module 4

Patterns and Sequences

Textbook section	IXL skills
4.1: Identifying and Graphing Sequences	1. Evaluate variable expressions for number sequences PMN
4.2: Constructing Arithmetic Sequences	1. Arithmetic sequences ALG 2. Write variable expressions for arithmetic sequences 5VF
4.3: Modeling with Arithmetic Sequences	

Module 5

Linear Functions

Textbook section	IXL skills
5.1: Understanding Linear Functions	<ol style="list-style-type: none">1. Complete a table and graph a linear function JFG2. Standard form: graph an equation U6U
5.2: Using Intercepts	<ol style="list-style-type: none">1. Standard form: find x- and y-intercepts 8SN
5.3: Interpreting Rate of Change and Slope	<ol style="list-style-type: none">1. Find the slope of a graph E7D2. Find the slope from two points MD5

Module 6

Forms of Linear Equations

Textbook section	IXL skills
6.1: Slope-Intercept Form	<ol style="list-style-type: none">1. Slope-intercept form: find the slope and y-intercept R5T2. Slope-intercept form: graph an equation UWB3. Slope-intercept form: write an equation from a graph 9GW4. Slope-intercept form: write an equation A42
6.2: Point-Slope Form	<ol style="list-style-type: none">1. Point-slope form: write an equation PPE2. Point-slope form: write an equation from a graph LBX
6.3: Standard Form	<ol style="list-style-type: none">1. Write equations in standard form ESP
6.4: Transforming Linear Functions	<ol style="list-style-type: none">1. Transformations of linear functions C8G
6.5: Comparing Properties of Linear Functions	<ol style="list-style-type: none">1. Compare linear functions: tables, graphs, and equations GD7

Module 7

Linear Equations and Inequalities

Textbook section

IXL skills

7.1: Modeling Linear Relationships

1. Slope-intercept form: write an equation from a word problem HWM
2. Write linear functions: word problems 9RQ

7.2: Using Functions to Solve One-Variable Equations

7.3: Linear Inequalities in Two Variables

1. Linear inequalities: solve for y UYU
2. Graph a two-variable linear inequality HHP
3. Linear inequalities: word problems ZAY

Module 8

Multi-Variable Categorical Data

Textbook section	IXL skills
8.1: Two-Way Frequency Tables	
8.2: Relative Frequency	

Module 9

One Variable Data Distributions

Textbook section	IXL skills
9.1: Measures of Center and Spread	<ol style="list-style-type: none">1. Mean, median, mode, and range MHB2. Calculate quartiles and interquartile range 8H93. Variance and standard deviation HX5
9.2: Data Distributions and Outliers	<ol style="list-style-type: none">1. Identify an outlier 87L2. Identify an outlier and describe the effect of removing it XGC
9.3: Histograms and Box Plots	<ol style="list-style-type: none">1. Interpret bar graphs, line graphs, and histograms B9A2. Box plots YE9
9.4: Normal Distributions	

Module 10

Linear Modeling and Regression

Textbook section	IXL skills
10.1: Scatter Plots and Trend Lines	<ol style="list-style-type: none">1. Interpret a scatter plot 8BS2. Match correlation coefficients to scatter plots FQ73. Scatter plots: line of best fit Y2S
10.2: Fitting a Linear Model to Data	<ol style="list-style-type: none">1. Find the equation of a regression line WJC2. Interpret regression lines SEQ3. Analyze a regression line of a data set 8D8

Module 11

Solving Systems of Linear Equations

Textbook section	IXL skills
11.1: Solving Linear Systems by Graphing	<ol style="list-style-type: none">1. Solve a system of equations by graphing TSS2. Solve a system of equations by graphing: word problems BVB3. Find the number of solutions to a system of equations by graphing HJW4. Classify a system of equations by graphing T2D
11.2: Solving Linear Systems by Substitution	<ol style="list-style-type: none">1. Find the number of solutions to a system of equations ACN2. Solve a system of equations using substitution 8P93. Solve a system of equations using substitution: word problems US9
11.3: Solving Linear Systems by Adding or Subtracting	<ol style="list-style-type: none">1. Solve a system of equations by adding or subtracting RMJ
11.4: Solving Linear Systems by Multiplying First	<ol style="list-style-type: none">1. Solve a system of equations using elimination A482. Solve a system of equations using elimination: word problems NHR3. Solve a system of equations using any method HLV

Module 12

Modeling with Linear Systems

Textbook section	IXL skills
12.1: Creating Systems of Linear Equations	1. Solve a system of equations using any method: word problems <small>GDQ</small>
12.2: Graphing Systems of Linear Inequalities	1. Is (x, y) a solution to the system of inequalities? <small>VFC</small> 2. Solve systems of linear inequalities by graphing <small>SGH</small>
12.3: Modeling with Linear Systems	

Module 13

Piecewise-Defined Functions

Textbook section

IXL skills

13.1: Understanding Piecewise-Defined Functions

13.2: Absolute Value Functions and Transformations

1. Complete a function table: absolute value functions 2DH
2. Graph an absolute value function TD2
3. Domain and range of absolute value functions: graphs NV7
4. Domain and range of absolute value functions: equations FCY
5. Transformations of absolute value functions 9TC

13.3: Solving Absolute Value Equations

1. Solve absolute value equations 9LF
2. Graph solutions to absolute value equations KXA

13.4: Solving Absolute Value Inequalities

1. Solve absolute value inequalities HXH
2. Graph solutions to absolute value inequalities NE9

Module 14

Geometric Sequences and Exponential Functions

Textbook section	IXL skills
14.1: Understanding Geometric Sequences	1. Geometric sequences HLJ
14.2: Constructing Geometric Sequences	1. Write variable expressions for geometric sequences XPC
14.3: Constructing Exponential Functions	1. Evaluate an exponential function D6H
14.4: Graphing Exponential Functions	1. Domain and range of exponential functions: equations DZE
14.5: Transforming Exponential Functions	1. Match exponential functions and graphs 72J 2. Domain and range of exponential functions: graphs ANC

Module 15

Exponential Equations and Models

Textbook section	IXL skills
15.1: Using Graphs and Properties to Solve Equations with Exponents	
15.2: Modeling Exponential Growth and Decay	1. Exponential growth and decay: word problems UKG
15.3: Using Exponential Regression Models	
15.4: Comparing Linear and Exponential Models	1. Describe linear and exponential growth and decay S7T

Module 16

Tools of Geometry

Textbook section	IXL skills
16.1: Segment Length and Midpoints	<ol style="list-style-type: none">1. Additive property of length 7RA2. Midpoint formula: find the midpoint 2YG3. Distance formula 59F
16.2: Angle Measures and Angle Bisectors	<ol style="list-style-type: none">1. Angle vocabulary 9U22. Angle measures BCQ
16.3: Representing and Describing Transformations	<ol style="list-style-type: none">1. Classify congruence transformations CXT
16.4: Reasoning and Proof	<ol style="list-style-type: none">1. Identify hypotheses and conclusions 7FW2. Counterexamples 2GJ3. Conditionals VU9

Module 17

Transformations and Symmetry

Textbook section	IXL skills
17.1: Translations	<ol style="list-style-type: none">Translations: find the coordinates F8UTranslations: write the rule 9PRFind the component form of a vector 2UV
17.2: Reflections	<ol style="list-style-type: none">Reflections: graph the image SM9Reflections: find the coordinates SVY
17.3: Rotations	<ol style="list-style-type: none">Rotate polygons about a point XM7Rotations: graph the image 6SDRotations: find the coordinates ZX5Congruence transformations: mixed review XQ7
17.4: Investigating Symmetry	<ol style="list-style-type: none">Line symmetry WBXRotational symmetry ERPDraw lines of symmetry JU7Count lines of symmetry M7U

Module 18

Congruent Figures

Textbook section

IXL skills

18.1: Sequences of Transformations

1. Sequences of congruence transformations: graph the image WHW
2. Dilations: graph the image ZRD
3. Dilations: find the coordinates 5KZ

18.2: Proving Figures are Congruent Using Rigid Motions

18.3: Corresponding Parts of Congruent Figures are Congruent

1. Congruence statements and corresponding parts CYL
2. Solve problems involving corresponding parts WYB
3. Identify congruent figures HU9

Module 19

Lines and Angles

Textbook section	IXL skills
19.1: Angles Formed by Intersecting Lines	<ol style="list-style-type: none">1. Identify complementary, supplementary, vertical, adjacent, and congruent angles 7P72. Find measures of complementary, supplementary, vertical, and adjacent angles VZU
19.2: Transversals and Parallel Lines	<ol style="list-style-type: none">1. Transversals: name angle pairs V852. Transversals of parallel lines: find angle measures WB9
19.3: Proving Lines are Parallel	<ol style="list-style-type: none">1. Proofs involving parallel lines I CUV
19.4: Perpendicular Lines	<ol style="list-style-type: none">1. Perpendicular Bisector Theorem BKS2. Construct a perpendicular line BZR
19.5: Equations of Parallel and Perpendicular Lines	<ol style="list-style-type: none">1. Slopes of parallel and perpendicular lines 6K22. Equations of parallel and perpendicular lines VEB

Module 20

Triangle Congruence Criteria

Textbook section	IXL skills
20.1: Exploring What Makes Triangles Congruent	
20.2: ASA Triangle Congruence	
20.3: SAS Triangle Congruence	
20.4: SSS Triangle Congruence	<ol style="list-style-type: none">1. SSS and SAS Theorems 48Q2. Proving triangles congruent by SSS and SAS vVZ

Module 21

Applications of Triangle Congruence

Textbook section	IXL skills
21.2: Justifying Constructions	
21.2: AAS Triangle Congruence	<ol style="list-style-type: none">1. ASA and AAS Theorems N942. Proving triangles congruent by ASA and AAS 23Z3. SSS, SAS, ASA, and AAS Theorems LER4. Proving triangles congruent by SSS, SAS, ASA, and AAS SZL
21.3: HL Triangle Congruence	<ol style="list-style-type: none">1. Proofs involving corresponding parts of congruent triangles AKL2. Hypotenuse-Leg Theorem VQJ

Module 22

Properties of Triangles

Textbook section	IXL skills
22.1: Interior and Exterior Angles	<ol style="list-style-type: none">1. Triangle Angle-Sum Theorem UBU2. Exterior Angle Theorem TGK3. Interior angles of polygons SZF
22.2: Isosceles and Equilateral Triangles	<ol style="list-style-type: none">1. Congruency in isosceles and equilateral triangles HPR2. Proofs involving isosceles triangles V45
22.3: Triangle Inequalities	<ol style="list-style-type: none">1. Angle-side relationships in triangles ZN82. Triangle Inequality Theorem BW7

Module 23

Special Segments in Triangles

Textbook section	IXL skills
23.1: Perpendicular Bisectors of Triangles	
23.2: Angle Bisectors of Triangles	1. Triangles and bisectors <small>GWE</small>
23.3: Medians and Altitudes of Triangles	1. Identify medians, altitudes, angle bisectors, and perpendicular bisectors <small>JWN</small>
23.4: Midsegments of Triangles	

Module 24

Properties of Quadrilaterals

Textbook section	IXL skills
24.1: Properties of Parallelograms	1. Properties of parallelograms LLK
24.2: Conditions for Parallelograms	1. Proving a quadrilateral is a parallelogram H89
24.3: Properties of Rectangles, Rhombuses, and Squares	1. Properties of rhombuses QVX 2. Properties of squares and rectangles R9M
24.4: Conditions for Rectangles, Rhombuses, and Squares	
24.5: Properties and Conditions for Kites and Trapezoids	1. Properties of trapezoids UC9 2. Properties of kites LZ9 3. Review: properties of quadrilaterals Q2R 4. Proofs involving triangles and quadrilaterals V7W 5. Proofs involving quadrilaterals P77

Module 25

Coordinate Proof Using Slope and Distance

Textbook section	IXL skills
25.1: Slope and Parallel Lines	
25.2: Slope and Perpendicular Lines	
25.3: Coordinate Proof Using Distance with Segments and Triangles	1. SSS Theorem in the coordinate plane C5G
25.4: Coordinate Proof Using Distance with Quadrilaterals	1. Find the distance between two parallel lines A7B
25.5: Perimeter and Area on the Coordinate Plane	1. Area and perimeter in the coordinate plane I QWZ 2. Area and perimeter in the coordinate plane II MHQ