



IXL Skill Alignment

6th grade alignment for enVisionMATH 2.0 Common Core Edition



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/envisionmath-20-common-core-edition-grade-6

This document includes the IXL® skill alignments to Pearson Education, Inc.'s **enVisionMATH 2.0 Common Core Edition** curriculum. IXL provides skill alignments as a service to teachers, students, and parents. The skill alignments are provided by IXL and are not affiliated with, sponsored by, reviewed, approved or endorsed by Pearson Education, Inc. or any other third party. IXL® and IXL Learning® are registered trademarks of IXL Learning, Inc. All other intellectual property rights (e.g., unregistered and registered trademarks and copyrights) are the property of their respective owners.

Visit IXL.com for more information

IXL Learning © 2021

Topic 1

Use Positive Rational Numbers

Textbook section	IXL skills
Lesson 1-1: Fluently Add, Subtract, and Multiply Decimals	<ol style="list-style-type: none"> 1. Add and subtract decimals 4F6 2. Multiply with decimals 6T4 3. Add, subtract, and multiply decimals: word problems 777 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Multiply decimals using grids NY9 • Multiply two decimals: where does the decimal point go? 5K4 • Estimate sums and differences of decimals SJ6
Lesson 1-2: Fluently Divide Whole Numbers and Decimals	<ol style="list-style-type: none"> 1. Division with decimal quotients 8WR 2. Divide decimals EN5 3. Multiply and divide decimals: word problems GZN
Lesson 1-3: Multiply Fractions	<ol style="list-style-type: none"> 1. Multiply two fractions BNT 2. Multiply mixed numbers Z9M 3. Multiply fractions and mixed numbers: word problems RS6 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Multiply two fractions using models B7P • Estimate products of mixed numbers 5BG • Multiply with mixed numbers using area models LGS
Lesson 1-4: Understand Division with Fractions	<ol style="list-style-type: none"> 1. Divide fractions and whole numbers 9GY <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Reciprocals R9V
Lesson 1-5: Divide Fractions by Fractions	<ol style="list-style-type: none"> 1. Divide fractions DS2 2. Divide fractions: word problems CLN

Lesson 1-6: Divide Mixed Numbers

1. Divide fractions and mixed numbers N2B
2. Divide fractions and mixed numbers: word problems WAH

Also consider

- Estimate quotients with mixed numbers 82P

Lesson 1-7: Solve Problems with Rational Numbers

1. Multi-step word problems with rational numbers RFM
2. Multiply money amounts: multi-step word problems 99Z

Topic 2

Integers and Rational Numbers

Textbook section

IXL skills

Lesson 2-1: Understand Integers

1. Graph integers on horizontal and vertical number lines 36C
2. Understanding opposite integers X8L
3. Compare and order integers 7ZF

Also consider

- Understanding integers 8EP

Lesson 2-2: Represent Rational Numbers on the Number Line

1. Rational numbers on number lines DJE
2. Compare and order rational numbers MFM
3. Compare and order rational numbers: word problems ETK

Also consider

- Compare and order rational numbers using number lines FMS
- Classify rational numbers using a diagram 64K

Lesson 2-3: Absolute Values of Rational Numbers

1. Understanding absolute value TLR
2. Absolute value RSL
3. Absolute value and integers: word problems 9CW

Also consider

- Inequalities with absolute values W9Z

Lesson 2-4: Represent Rational Numbers on the Coordinate Plane

1. Objects on a coordinate plane GFN
2. Graph points on a coordinate plane VHQ
3. Reflections of points KDG

Also consider

- Quadrants F5T
- Describe the coordinate plane KU7

Lesson 2-5: Find Distances on the Coordinate Plane

1. Distances on coordinate planes as maps 2QH
2. Distance between two points A7P

Also consider

- Follow directions on a coordinate plane XDQ
-

Lesson 2-6: Represent Polygons on the Coordinate Plane

1. Graph quadrilaterals on the coordinate plane ASR
 2. Area and perimeter of squares and rectangles on the coordinate plane UCD
-

Topic 3

Numeric and Algebraic Expressions

Textbook section

IXL skills

Lesson 3-1: Understand and Represent Exponents

1. Write multiplication expressions using exponents TY5
2. Evaluate exponents ENJ
3. Multiply a decimal by a power of ten: with exponents JTV

Also consider

- Find the missing exponent or base HC5

Lesson 3-2: Find Greatest Common Factor and Least Common Multiple

1. Prime factorization 9CP
2. Greatest common factor AMB
3. Least common multiple NGA

Also consider

- GCF and LCM: word problems ZB8
- Prime factorization with exponents WLU

Lesson 3-3: Write and Evaluate Numerical Expressions

1. Evaluate numerical expressions involving whole numbers MLU
2. Evaluate numerical expressions with parentheses in different places NCR
3. Write numerical expressions for word problems XB2

Also consider

- Evaluate numerical expressions involving decimals YEE
- Evaluate numerical expressions involving fractions WNE
- Identify mistakes involving the order of operations V46

Lesson 3-4: Write Algebraic Expressions

1. Write variable expressions RCV
2. Write variable expressions: word problems 6LQ
3. Identify terms and coefficients 9KE

Lesson 3-5: Evaluate Algebraic Expressions

1. Evaluate variable expressions SY5
2. Evaluate variable expressions with decimals, fractions, and mixed numbers 49T
3. Evaluate variable expressions: word problems 7XA

Lesson 3-6: Generate Equivalent Expressions

1. Multiply using the distributive property 2HH
2. Factor using the distributive property PGZ

Also consider

- Write equivalent expressions using properties R8H

Lesson 3-7: Simplify Algebraic Expressions

1. Add and subtract like terms CN9
2. Identify equivalent expressions I KFG
3. Identify equivalent expressions II HTG

Also consider

- Identify equivalent expressions using strip models W5U

Topic 4

Represent and Solve Equations and Inequalities

Textbook section	IXL skills
Lesson 4-1: Understand Equations and Solutions	<ol style="list-style-type: none"> 1. Does x satisfy an equation? VMB 2. Which x satisfies an equation? VG8 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Identify expressions and equations GCQ
Lesson 4-2: Apply Properties of Equality	<ol style="list-style-type: none"> 1. Properties of equality 5NB
Lesson 4-3: Write and Solve Addition and Subtraction Equations	<ol style="list-style-type: none"> 1. Solve one-step addition and subtraction equations with whole numbers JXM 2. Solve one-step addition and subtraction equations: word problems 35Q 3. Write and solve addition and subtraction equations using diagrams: word problems DWH
Lesson 4-4: Write and Solve Multiplication and Division Equations	<ol style="list-style-type: none"> 1. Solve one-step multiplication and division equations with whole numbers JUA 2. Write and solve multiplication and division equations using diagrams: word problems ZP6 3. Solve one-step multiplication and division equations: word problems GMV <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Solve one-step equations with whole numbers WLR • Which word problem matches the one-step equation? WYQ
Lesson 4-5: Write and Solve Equations with Rational Numbers	<ol style="list-style-type: none"> 1. Solve one-step addition and subtraction equations with decimals, fractions, and mixed numbers 5D2 2. Solve one-step multiplication and division equations with decimals, fractions, and whole numbers T53 3. Solve one-step equations: word problems BXY
Lesson 4-6: Understand and Write Inequalities	<ol style="list-style-type: none"> 1. Solutions to inequalities P9N

Lesson 4-7: Solve Inequalities

1. Graph inequalities on number lines 6VS
2. Write inequalities from number lines CKJ
3. Write and graph inequalities: word problems AGB

Lesson 4-8: Understand Dependent and Independent Variables

1. Identify independent and dependent variables: word problems 9UJ

Also consider

- Identify independent and dependent variables in tables and graphs YFW

Lesson 4-9: Use Patterns to Write and Solve Equations

1. Complete a table for a two-variable relationship MJF
2. Write a two-variable equation from a table ZTL
3. Find a value using two-variable equations: word problems SLK

Also consider

- Write a two-variable equation 2RE
- Solve word problems by finding two-variable equations UJQ

Lesson 4-10: Relate Tables, Graphs, and Equations

1. Write an equation from a graph using a table BCM
2. Complete a table and graph a two-variable equation EY5
3. Graph a two-variable equation TJA

Also consider

- Identify the graph of an equation WN7
- Interpret a graph: word problems KZD

Topic 5

Understand and Use Ratio and Rate

Textbook section	IXL skills
Lesson 5-1: Understand Ratios	<ol style="list-style-type: none"> 1. Write a ratio V7K 2. Use tape diagrams to solve ratio word problems B2A
Lesson 5-2: Generate Equivalent Ratios	<ol style="list-style-type: none"> 1. Identify equivalent ratios 2LM 2. Write an equivalent ratio NEA 3. Ratio tables PPF <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Equivalent ratios: word problems RLZ
Lesson 5-3: Compare Ratios	<ol style="list-style-type: none"> 1. Compare ratios: word problems 2HT
Lesson 5-4: Represent and Graph Ratios	<ol style="list-style-type: none"> 1. Ratios and rates: complete a table and make a graph 6Z2
Lesson 5-5: Understand Rates and Unit Rate	<ol style="list-style-type: none"> 1. Unit rates JSZ 2. Equivalent rates 9AF
Lesson 5-6: Compare Unit Rates	<ol style="list-style-type: none"> 1. Compare rates: word problems NAF 2. Unit prices UKD
Lesson 5-7: Solve Unit Rate Problems	<ol style="list-style-type: none"> 1. Ratios and rates: word problems ZB9
Lesson 5-8: Ratio Reasoning: Convert Customary Units	<ol style="list-style-type: none"> 1. Convert customary units WQY 2. Convert customary units using proportions JG8 3. Multi-step problems with customary unit conversions CQT
Lesson 5-9: Ratio Reasoning: Convert Metric Units	<ol style="list-style-type: none"> 1. Convert metric units KRR 2. Convert metric units using proportions VLV 3. Multi-step problems with metric unit conversions MZA
Lesson 5-10: Relate Customary and Metric Units	<ol style="list-style-type: none"> 1. Convert between customary and metric systems 5CF

Topic 6

Understand and Use Percent

Textbook section	IXL skills
Lesson 6-1: Understand Percent	<ol style="list-style-type: none"> 1. What percentage is illustrated? RHG 2. Understanding percents: strip models 5JV 3. Convert fractions to percents using grid models ZDZ
Lesson 6-2: Relate Fractions, Decimals, and Percents	<ol style="list-style-type: none"> 1. Convert between percents, fractions, and decimals QQW 2. Convert between percents, fractions, and decimals: word problems CGG
Lesson 6-3: Represent Percents Greater than 100 or Less than 1	<ol style="list-style-type: none"> 1. Convert between percents, fractions, and decimals: percents greater than 100% B2U
Lesson 6-4: Estimate to Find Percent	<ol style="list-style-type: none"> 1. Estimate percents of numbers 9CV
Lesson 6-5: Find the Percent of a Number	<ol style="list-style-type: none"> 1. Percents of numbers and money amounts 8N4 2. Find what percent one number is of another PE7 3. Solve percent word problems YWB <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Percents of numbers: fractional and decimal percents CD5 • Percents - calculate tax, tip, mark-up, and more 32K • Sale prices 5GH
Lesson 6-6: Find the Whole Given a Part and the Percent	<ol style="list-style-type: none"> 1. Find the total given a part and a percent D6L 2. Solve percent problems using strip models MEA <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Sale prices: find the original price NW7

Topic 7

Solve Area, Surface Area, and Volume Problems

Textbook section	IXL skills
Lesson 7-1: Find Areas of Parallelograms and Rhombuses	<ol style="list-style-type: none"> Understanding area of a parallelogram QMU Area of parallelograms Y8K
Lesson 7-2: Solve Triangle Area Problems	<ol style="list-style-type: none"> Understanding area of a triangle QEY Area of triangles C8S Area of quadrilaterals and triangles: word problems 9RW
Lesson 7-3: Find Areas of Trapezoids and Kites	<ol style="list-style-type: none"> Understanding area of a trapezoid 42R Area of trapezoids PKW Area of composite figures I 5PM
Lesson 7-4: Find Areas of Polygons	<ol style="list-style-type: none"> Area of composite figures II F5P Area between two rectangles EY6 Area of figures on the coordinate plane 5AW
Lesson 7-5: Represent Solid Figures Using Nets	<ol style="list-style-type: none"> Nets of three-dimensional figures 8KP Count vertices, edges, and faces 8SF <p><i>Also consider</i></p> <ul style="list-style-type: none"> Which figure is being described? 9WV
Lesson 7-6: Find Surface Areas of Prisms	<ol style="list-style-type: none"> Surface area of cubes and rectangular prisms RMG Surface area of triangular prisms UGR
Lesson 7-7: Find Surface Areas of Pyramids	<ol style="list-style-type: none"> Surface area of pyramids 5XW
Lesson 7-8: Find Volume with Fractional Edge Lengths	<ol style="list-style-type: none"> Volume of cubes and rectangular prisms with fractional side lengths BQK Volume of cubes and rectangular prisms: word problems BBM <p><i>Also consider</i></p> <ul style="list-style-type: none"> Volume of cubes and rectangular prisms XHF

Topic 8

Display, Describe, and Summarize Data

Textbook section	IXL skills
Lesson 8-1: Recognize Statistical Questions	1. Identify statistical questions PT7 <i>Also consider</i> <ul style="list-style-type: none"> Interpret line plots M5Y Create line plots 5HD
Lesson 8-2: Summarize Data Using Mean, Median, Mode, and Range	1. Calculate mean, median, mode, and range ZZK 2. Changes in mean, median, mode, and range 2G9 <i>Also consider</i> <ul style="list-style-type: none"> Mean, median, mode, and range: find the missing number 77K
Lesson 8-3: Display Data in Box Plots	1. Calculate quartiles F74 2. Box plots CWL
Lesson 8-4: Display Data in Frequency Tables and Histograms	1. Interpret frequency charts TGR 2. Create frequency charts UUN 3. Interpret histograms CBF 4. Create histograms 7NG
Lesson 8-5: Summarize Data Using Measures of Variability	1. Calculate mean absolute deviation JUV 2. Calculate interquartile range ZGP
Lesson 8-6: Choose Appropriate Statistical Measures	<ul style="list-style-type: none"> <i>Coming soon:</i> Choose appropriate measures to describe distributions <i>Also consider</i> <ul style="list-style-type: none"> Identify an outlier 86B
Lesson 8-7: Summarize Data Distributions	1. Describe distributions in line plots RZL