



IXL Skill Alignment

Grade 7 alignment for enVision Mathematics Common Core



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Topic 1

Rational Number Operations

Textbook section	IXL skills
Lesson 1-1: Relate Integers and Their Opposites	<ol style="list-style-type: none">1. Absolute value and opposite integers NSB2. Quantities that combine to zero: word problems 7SP <p><i>Also consider</i></p> <ul style="list-style-type: none">• Understanding integers YBC• Integers on number lines A5Y• Graph integers on horizontal and vertical number lines EM8
Lesson 1-2: Understand Rational Numbers	<ol style="list-style-type: none">1. Convert fractions or mixed numbers to decimals BRK2. Identify rational numbers DE8 <p><i>Also consider</i></p> <ul style="list-style-type: none">• Classify rational numbers using a diagram 6KA
Lesson 1-3: Add Integers	<ol style="list-style-type: none">1. Integer addition rules ERH2. Add integers using number lines A633. Add integers QFU
Lesson 1-4: Subtract Integers	<ol style="list-style-type: none">1. Integer subtraction rules QZA2. Subtract integers using number lines FGG3. Subtract integers HEU <p><i>Also consider</i></p> <ul style="list-style-type: none">• Complete addition and subtraction equations with integers P6A
Lesson 1-5: Add and Subtract Rational Numbers	<ol style="list-style-type: none">1. Add and subtract positive and negative decimals WCZ2. Add and subtract positive and negative fractions SD23. Add and subtract rational numbers GKU

Also consider

- Apply addition and subtraction rules Y8T

Lesson 1-6: Multiply Integers

1. Integer multiplication rules K7U
 2. Multiply integers DQT
- *Coming soon:* Multiply integers using number lines

Lesson 1-7: Multiply Rational Numbers

1. Multiply rational numbers FGQ

Lesson 1-8: Divide Integers

1. Integer division rules T9Q
2. Equal quotients of integers 2QY
3. Divide integers CTV

Also consider

- Complete multiplication and division equations with integers K94

Lesson 1-9: Divide Rational Numbers

1. Divide rational numbers C9V

Also consider

- Apply multiplication and division rules V5V

Lesson 1-10: Solve Problems with Rational Numbers

1. Add and subtract integers: word problems 2DD
2. Identify quotients of rational numbers: word problems JT9

Topic 2

Analyze and Use Proportional Relationships

Textbook section	IXL skills
Lesson 2-1: Connect Ratios, Rates, and Unit Rates	<ol style="list-style-type: none"> 1. Unit rates 2NB 2. Unit prices N7G 3. Compare rates: word problems VVS <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Equivalent ratios: word problems DJ8
Lesson 2-2: Determine Unit Rates with Ratios of Fractions	<ol style="list-style-type: none"> 1. Calculate unit rates with fractions 57X
Lesson 2-3: Understand Proportional Relationships: Equivalent Ratios	<ol style="list-style-type: none"> 1. Do the ratios form a proportion? MJQ 2. Solve proportions TDA 3. Solve proportions: word problems WB7 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Do the ratios form a proportion: word problems SHV
Lesson 2-4: Describe Proportional Relationships: Constant of Proportionality	<ol style="list-style-type: none"> 1. Write equations for proportional relationships from tables 6GU 2. Identify proportional relationships from tables 6V7 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Identify proportional relationships from equations G8X • Find the constant of proportionality from a table LKZ
Lesson 2-5: Graph Proportional Relationships	<ol style="list-style-type: none"> 1. Identify graphs of proportional relationships FYR 2. Identify proportional relationships by graphing AAN 3. Write equations for proportional relationships from graphs JKH

Also consider

- Interpret graphs of proportional relationships RMH

Lesson 2-6: Apply Proportional Reasoning to Solve Problems

1. Write and solve equations for proportional relationships VKK
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Topic 3

Analyze and Solve Percent Problems

Textbook section	IXL skills
Lesson 3-1: Analyze Percents of Numbers	<ol style="list-style-type: none"> 1. Percents of numbers and money amounts 93K 2. Percents of numbers: word problems EXE <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Solve percent problems using strip models 9XC
Lesson 3-2: Connect Percent and Proportion	<ol style="list-style-type: none"> 1. Solve percent equations 67F
Lesson 3-3: Represent and Use the Percent Equation	<ol style="list-style-type: none"> 1. Solve percent equations: word problems JS6 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Estimate tips Y5R
Lesson 3-4: Solve Percent Change and Percent Error Problems	<ol style="list-style-type: none"> 1. Percent of change BL7 2. Percent of change: word problems 54S <ul style="list-style-type: none"> • <i>Coming soon:</i> Percent error word problems <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Percent of change: find the original amount word problems RCM
Lesson 3-5: Solve Markup and Markdown Problems	<ol style="list-style-type: none"> 1. Percent of a number: tax, discount, and more SPN 2. Find the percent: tax, discount, and more PBM <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Sale prices: find the original price BDA
Lesson 3-6: Solve Simple Interest Problems	<ol style="list-style-type: none"> 1. Simple interest E7Y

Topic 4

Generate Equivalent Expressions

Textbook section	IXL skills
Lesson 4-1: Write and Evaluate Algebraic Expressions	<ol style="list-style-type: none"> Evaluate linear expressions UG6 Evaluate two-variable expressions 8SR <p><i>Also consider</i></p> <ul style="list-style-type: none"> Write variable expressions: word problems XMD
Lesson 4-2: Generate Equivalent Expressions	<ol style="list-style-type: none"> Identify equivalent expressions KQW <p><i>Also consider</i></p> <ul style="list-style-type: none"> Properties of addition and multiplication D6G
Lesson 4-3: Simplify Expressions	<ol style="list-style-type: none"> Simplify expressions by combining like terms: with algebra tiles PCU Simplify expressions by combining like terms: using properties AH7 Simplify expressions by combining like terms JJG
Lesson 4-4: Expand Expressions	<ol style="list-style-type: none"> Multiply using the distributive property NUY <ul style="list-style-type: none"> <i>Coming soon:</i> Simplify using the distributive property: with models
Lesson 4-5: Factor Expressions	<ol style="list-style-type: none"> Factors of linear expressions J9G <ul style="list-style-type: none"> <i>Coming soon:</i> Factor linear expressions: with models <p><i>Also consider</i></p> <ul style="list-style-type: none"> Greatest common factor YFF Sort factors of variable expressions BUX
Lesson 4-6: Add Expressions	<ol style="list-style-type: none"> Add expressions RPY
Lesson 4-7: Subtract Expressions	<ol style="list-style-type: none"> Subtract expressions KCX
Lesson 4-8: Analyze Equivalent Expressions	<ol style="list-style-type: none"> Identify equivalent linear expressions: word problems KWH

Topic 5

Solve Problems Using Equations and Inequalities

Textbook section	IXL skills
Lesson 5-1: Write Two-Step Equations	<ul style="list-style-type: none"> <i>Coming soon:</i> Represent linear word problems using tape diagrams <i>Coming soon:</i> Model word problems with two-step equations
Lesson 5-2: Solve Two-Step Equations	<ol style="list-style-type: none"> Solve two-step equations CMX <p><i>Also consider</i></p> <ul style="list-style-type: none"> Model and solve equations using algebra tiles EGK
Lesson 5-3: Solve Equations Using the Distributive Property	<ol style="list-style-type: none"> Solve equations with parentheses NSH Solve equations: complete the solution 66R Solve equations: word problems D2Y
Lesson 5-4: Solve Inequalities Using Addition or Subtraction	<ol style="list-style-type: none"> Solve one-step addition and subtraction inequalities XPQ <p><i>Also consider</i></p> <ul style="list-style-type: none"> Solutions to inequalities 8BA Graph inequalities on number lines VLU
Lesson 5-5: Solving Inequalities Using Multiplication or Division	<ol style="list-style-type: none"> Solve one-step multiplication and division inequalities 2YB Graph solutions to one-step inequalities TFK One-step inequalities: word problems 6HD
Lesson 5-6: Solve Two-Step Inequalities	<ol style="list-style-type: none"> Solve two-step inequalities XGQ Graph solutions to two-step inequalities 6TT
Lesson 5-7: Solve Multi-Step Inequalities	<ol style="list-style-type: none"> Solve multi-step inequalities DYL Graph solutions to multi-step inequalities WE9 <ul style="list-style-type: none"> <i>Coming soon:</i> Model and solve two-step inequalities: word problems

Topic 6

Use Sampling to Draw Inferences About Populations

Textbook section	IXL skills
Lesson 6-1: Populations and Samples	1. Identify representative, random, and biased samples 5V3
Lesson 6-2: Draw Inferences from Data	1. Interpret charts and graphs to find mean, median, mode, and range CYK 2. Box plots SKN <i>Also consider</i> <ul style="list-style-type: none">Estimate population size using proportions 3C9
Lesson 6-3: Make Comparative Inferences About Populations	
Lesson 6-4: Make More Comparative Inferences About Populations	

Topic 7

Probability

Textbook section	IXL skills
Lesson 7-1: Understand Likelihood and Probability	
Lesson 7-2: Understand Theoretical Probability	<ol style="list-style-type: none">1. Probability of simple events ZZB2. Make predictions using theoretical probability 9UW
Lesson 7-3: Understand Experimental Probability	<ol style="list-style-type: none">1. Experimental probability 9AA2. Make predictions using experimental probability WP6
Lesson 7-4: Use Probability Models	
Lesson 7-5: Determine Outcomes of Compound Events	<ol style="list-style-type: none">1. Compound events: find the number of outcomes HZR
Lesson 7-6: Find Probabilities of Compound Events	<ol style="list-style-type: none">1. Probability of compound events YPQ
Lesson 7-7: Simulate Compound Events	

Topic 8

Solve Problems Involving Geometry

Textbook section	IXL skills
Lesson 8-1: Solve Problems Involving Scale Drawings	1. Scale drawings: word problems 84H 2. Scale drawings: scale factor word problems KCM <ul style="list-style-type: none"> • <i>Coming soon:</i> Find the area of a scaled figure
Lesson 8-2: Draw Geometric Figures	1. Draw quadrilaterals WFE
Lesson 8-3: Draw Triangles with Given Conditions	1. Triangle inequality 5RX <ul style="list-style-type: none"> • <i>Coming soon:</i> How many triangles can be made
Lesson 8-4: Solve Problems Using Angle Relationships	1. Identify complementary, supplementary, vertical, and adjacent angles HKG 2. Find measures of complementary, supplementary, vertical, and adjacent angles CST <ul style="list-style-type: none"> • <i>Coming soon:</i> Solve equations to find measures of angles
Lesson 8-5: Solve Problems Involving Circumference of a Circle	1. Parts of a circle 2VL 2. Circumference of circles KS7
Lesson 8-6: Solve Problems Involving Area of a Circle	1. Area of circles YA8 2. Circles: word problems P56 <ul style="list-style-type: none"> • <i>Coming soon:</i> Understanding area of a circle
Lesson 8-7: Describe Cross Sections	1. Cross sections of three-dimensional figures HFJ
Lesson 8-8: Solve Problems Involving Surface Area	1. Area of compound figures with triangles MRG 2. Surface area of prisms and pyramids 6SN
Lesson 8-9: Solve Problems Involving Volume	1. Volume of cubes and prisms URT 2. Volume of cubes and rectangular prisms: word problems 8WV <ul style="list-style-type: none"> • <i>Coming soon:</i> Volume of prisms