



IXL Skill Alignment

Course 2 alignment for CPM Core Connections



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Chapter 1

Introduction and Probability

Section 1.1

Textbook section	IXL skills
1.1.1: Finding Shared and Unique Characteristics	<ol style="list-style-type: none"> 1. Use Venn diagrams to solve problems 2RH 2. Sort polygons into Venn diagrams Z9H
1.1.2: Analyzing a Game	<ol style="list-style-type: none"> 1. Area of rectangles and parallelograms 62H 2. Area of triangles and trapezoids ENE
1.1.3: Finding Unknowns	<ol style="list-style-type: none"> 1. Solve one-step equations: word problems PTR 2. Calculate mean MXQ 3. Identify an outlier XHL
1.1.4: Investigating a Proportional Relationship	<ol style="list-style-type: none"> 1. Complete a table for a two-variable relationship: word problems BF2 2. Calculate median 8MR
1.1.5: Investigating Number Patterns	<ol style="list-style-type: none"> 1. Convert fractions or mixed numbers to decimals BRK 2. What fraction, decimal, or percentage is illustrated? JSM 3. Convert between percents and decimals H2F

Section 1.2

Textbook section	IXL skills
1.2.1: Introductions to Probability	<ol style="list-style-type: none"> 1. Experimental probability 9AA • <i>Coming soon:</i> Describe probabilities
1.2.2: Investigating Probability	<ol style="list-style-type: none"> 1. Make predictions using experimental probability WP6
1.2.3: Modifying the Sample Space	<ol style="list-style-type: none"> 1. Make predictions using theoretical probability 9UW

1.2.4: Expressing Fractions as Percents

1. Convert fractions to percents using grid models 9C5
2. Convert between percents and fractions AUT
3. Compare percents to fractions and decimals JAE

1.2.5: Rewriting Fractions

1. Equivalent fractions KDL

1.2.6: Fraction Addition

1. Add and subtract fractions NGL

1.2.7: Compound Probability

1. Probability of either one event or another event occurring 9W9

1.2.8: Subtracting Probabilities

1. Add and subtract fractions: word problems ENL

Also consider

- Area and perimeter of polygons 6P5

Chapter 2

Fractions and Integer Addition

Section 2.1

Textbook section	IXL skills
2.1.1: Fraction-to-Decimal Conversions	1. Convert fractions or mixed numbers to decimals BRK <i>Also consider</i> <ul style="list-style-type: none"> Convert between mixed numbers and improper fractions LGK
2.1.2: Rewriting Decimals as Fractions	1. Convert decimals to fractions or mixed numbers HZD

Section 2.2

Textbook section	IXL skills
2.2.1: Composing Integers	1. Understanding integers YBC 2. Integers on number lines A5Y
2.2.2: Adding Integers and Rational Numbers	1. Integer addition rules ERH 2. Add integers using number lines A63 3. Add integers using counters FTM <i>Also consider</i> <ul style="list-style-type: none"> Understanding absolute value 6PJ Quantities that combine to zero: word problems 7SP
2.2.3: More Addition of Integers and Rational Numbers	1. Add integers QFU 2. Add three or more integers PBC
2.2.4: Multiplication as Repeated Addition	1. Multiply positive numbers using the distributive property AN9 <ul style="list-style-type: none"> <i>Coming soon:</i> Multiply integers using number lines

2.2.5: Multiplication of Portions

1. Multiply two fractions using models LMX
2. Multiply fractions PDK
3. Multiply fractions: word problems A6R

2.2.6: Multiplying Mixed Numbers

1. Multiply with mixed numbers using area models 9TW
2. Multiply mixed numbers JNY
3. Multiply fractions and mixed numbers: word problems 5NJ

Section 2.3**Textbook section****IXL skills****2.3.1: Choosing a Scale and Graphing Data**

1. Create scatter plots FTG

2.3.2: More Graph Scaling

1. Predictions and trends in scatter plots UBD

Chapter 3

Arithmetic Properties

Section 3.1

Textbook section	IXL skills
3.1.1: Grouping Expressions	<ol style="list-style-type: none"> Evaluate numerical expressions: positive numbers K7H Evaluate numerical expressions with parentheses in different places: positive numbers 7EM
3.1.2: Identifying Terms in Expressions	<ol style="list-style-type: none"> Identify mistakes involving the order of operations: positive numbers L5W Evaluate numerical expressions involving fractions: positive numbers STZ Evaluate numerical expressions involving decimals: positive numbers PXX

Section 3.2

Textbook section	IXL skills
3.2.1: Subtraction of Integers	<ol style="list-style-type: none"> Subtract integers using counters BGL Subtract integers using number lines FGG Subtract integers HEU <p><i>Also consider</i></p> <ul style="list-style-type: none"> Integer subtraction rules QZA
3.2.2: Connecting Addition and Subtraction	<ol style="list-style-type: none"> Integer addition and subtraction rules 6EV Add and subtract integers FNS Add and subtract integers: word problems 2DD <p><i>Also consider</i></p> <ul style="list-style-type: none"> Add and subtract integers using counters B8X
3.2.3: Multiplication as Repeated Subtraction	<ol style="list-style-type: none"> Understand multiplying by a negative integer using a number line NB8 Multiply integers DQT

3.2.4: Multiplication of Decimals

1. Multiply decimals TCU
2. Multiply positive and negative decimals VN5

3.2.5: Addition, Subtraction, Multiplication, and Division of Integers

1. Divide integers CTV
2. Add, subtract, multiply, and divide integers B8A
3. Evaluate numerical expressions involving integers 7YN

Also consider

- Multiplicative inverses GQG

Section 3.3**Textbook section****IXL skills****3.3.1:** Division with Rational Numbers

1. Equal quotients of integers 2QY
2. Divide positive and negative fractions 92N

3.3.2: Division with Decimals

1. Divide decimals 6HB

Also consider

- Identify quotients of rational numbers: word problems JT9

3.3.3: Arithmetic Properties

1. Identify properties of addition and multiplication XYH

Chapter 4

Proportions and Expressions

Section 4.1

Textbook section	IXL skills
4.1.1: Similar Figures	1. Side lengths and angle measures of similar figures JA5
4.1.2: Scale Drawings	1. Scale drawings: word problems 84H 2. Scale drawings: scale factor word problems KCM

Section 4.2

Textbook section	IXL skills
4.2.1: Recognizing Proportional Relationships	1. Identify proportional relationships by graphing AAN
4.2.2: Proportional Relationships with Tables and Graphs	1. Identify proportional relationships from tables 6V7 2. Identify graphs of proportional relationships FYR
4.2.3: Unit Rate and Proportional Equations	1. Calculate unit rates with fractions 57X
4.2.4: Connecting Representations of Proportional Relationships	1. Find the constant of proportionality from a table LKZ 2. Find the constant of proportionality from a graph ZUT 3. Identify proportional relationships from equations G8X <i>Also consider</i> • Write equations for proportional relationships from tables 6GU • Write equations for proportional relationships from graphs JKH

Section 4.3

Textbook section	IXL skills
4.3.1: Combining Like Terms	<ol style="list-style-type: none">1. Identify terms and coefficients E7H2. Combine like terms using algebra tiles TLY3. Combine like terms TSC
4.3.2: Distributive Property	<ol style="list-style-type: none">1. Multiply using the distributive property CQ6 <p><i>Also consider</i></p> <ul style="list-style-type: none">• Evaluate linear expressions UG6
4.3.3: Simplifying with Zero	<ol style="list-style-type: none">1. Properties of addition and multiplication D6G2. Identify equivalent linear expressions using algebra tiles 38V3. Identify equivalent linear expressions I DRB <p><i>Also consider</i></p> <ul style="list-style-type: none">• Write equivalent expressions using properties 6XR

Chapter 5

Probability and Solving Word Problems

Section 5.1

Textbook section	IXL skills
5.1.1: Part-Whole Relationships	<ol style="list-style-type: none"> 1. Equivalent ratios VSL 2. Solve percent problems using strip models 9XC 3. Solve percent equations: word problems JS6 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Percents of numbers and money amounts 93K • Percents of numbers: word problems EXE • Solve percent equations 67F
5.1.2: Finding and Using Percentages	<ol style="list-style-type: none"> 1. Sale prices RH9 2. Find the percent: tax, discount, and more PBM 3. Estimate tips Y5R <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Which is the better coupon? QT6

Section 5.2

Textbook section	IXL skills
5.2.1: Probability Games	<ol style="list-style-type: none"> 1. Probability of simple events ZZB 2. Probability of simple events and opposite events F88
5.2.2: Computer Simulations of Probability	
5.2.3: Compound Independent Events	<ol style="list-style-type: none"> 1. Identify independent and dependent events 9M6 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Probability of independent and dependent events NED • Find the number of outcomes: word problems EKX

5.2.4: Probability Tables

5.2.5: Probability Trees

1. Compound events: find the number of outcomes HZR

Also consider

- Probability of mutually exclusive events and overlapping events 8TP

5.2.6: Compound Events

1. Probability of compound events YPQ

Section 5.3

Textbook section	IXL skills
5.3.1: Describing Relationships Between Quantities	<ol style="list-style-type: none"> 1. Addition, subtraction, multiplication, and division word problems DQP
5.3.2: Solving a Word Problem	<ol style="list-style-type: none"> 1. Solve multi-step word problems with strip diagrams T5Q 2. Represent and solve multi-step word problems with strip diagrams RNP
5.3.3: Strategies for Using the 5-D Process	<ol style="list-style-type: none"> 1. Multi-step word problems: identify reasonable answers MDP 2. Multi-step word problems GN6
5.3.4: Using Variables to Represent Quantities in Word Problems	<ol style="list-style-type: none"> 1. Guess-and-check word problems JSR 2. Write and solve one-step equations using strip diagrams: word problems Y7E <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Write variable expressions: word problems XMD
5.3.5: More Word Problem Solving	

Chapter 6

Solving Inequalities and Equations

Section 6.1

Textbook section	IXL skills
6.1.1: Comparing Expressions	1. Solutions to inequalities 8BA
6.1.2: Comparing Quantities with Variables	1. Graph inequalities on number lines VLU
6.1.3: One Variable Inequalities	1. Write inequalities from number lines JNL
6.1.4: Solving One Variable Inequalities	1. Solve one-step inequalities QWH 2. Graph solutions to one-step inequalities TFK 3. One-step inequalities: word problems 6HD <i>Also consider</i> <ul style="list-style-type: none"> Solve two-step inequalities XGQ Graph solutions to two-step inequalities 6TT

Section 6.2

Textbook section	IXL skills
6.2.1: Solving Equations	1. Model and solve equations using algebra tiles EGK
6.2.2: Checking Solutions and the Distributive Property	1. Which x satisfies an equation? DJS
6.2.3: Solving Equations and Recording Work	1. Solve two-step equations QEB 2. Solve equations: complete the solution 66R 3. Solve equations involving like terms VSW
6.2.4: Using a Table to Write Equations from Word Problems	1. Solve equations: word problems D2Y
6.2.5: Writing and Solving Equations	1. Write and solve equations that represent diagrams FVH



6.2.6: Cases with Infinite or no Solutions

1. Find the number of solutions HQN

6.2.7: Choosing a Solving Strategy

1. Solve equations with variables on both sides FC9

Chapter 7

Proportions and Percents

Section 7.1

Textbook section	IXL skills
7.1.1: Distance, Rate, and Time	
7.1.2: Scaling Quantities	<ol style="list-style-type: none"> Scaling whole numbers by fractions: justify your answer KHZ Scaling by fractions and mixed numbers XZR
7.1.3: Solving Problems Involving Percents	<ol style="list-style-type: none"> Percent of a number: tax, discount, and more SPN <p><i>Also consider</i></p> <ul style="list-style-type: none"> Sale prices: find the original price BDA Multi-step problems with percents ZHX
7.1.4: Equations with Fractions and Decimal Coefficients	<ol style="list-style-type: none"> Solve one-step addition and subtraction equations with decimals, fractions, and mixed numbers DMB
7.1.5: Creating Integer Coefficients	<ol style="list-style-type: none"> Solve one-step multiplication and division equations with decimals, fractions, and whole numbers EEC
7.1.6: Creating Integer Coefficients Efficiently	<ul style="list-style-type: none"> <i>Coming soon:</i> Solve two-step equations with fractional coefficients
7.1.7: Percent Increase and Decrease	<ol style="list-style-type: none"> Percent of change BL7 Percent of change: word problems 54S <p><i>Also consider</i></p> <ul style="list-style-type: none"> Percent of change: find the original amount word problems RCM
7.1.8: Simple Interest	<ol style="list-style-type: none"> Simple interest E7Y

Section 7.2

Textbook section	IXL skills
7.2.1: Finding Missing Information in Proportional Relationships	<ol style="list-style-type: none">1. Solve proportions TDA2. Solve proportions: word problems WB7
7.2.2: Solving Proportions	<ol style="list-style-type: none">1. Find side lengths of similar figures 2JR

Chapter 8

Statistics and Angle Relationships

Section 8.1

Textbook section	IXL skills
8.1.1: Measurement Precision	<ol style="list-style-type: none">1. Identify an outlier XHL2. Create histograms LGG3. Box plots SKN <p><i>Also consider</i></p> <ul style="list-style-type: none">• Interpret histograms XMF• Precision B6B
8.1.2: Comparing Distributions	<ol style="list-style-type: none">1. Calculate mean and median JF22. Calculate quartiles and interquartile range NZN

Section 8.2

Textbook section	IXL skills
8.2.1: Representative Samples	<ol style="list-style-type: none">1. Identify representative, random, and biased samples 5V3
8.2.2: Inference from Random Samples	

Section 8.3

Textbook section	IXL skills
8.3.1: Introduction to Angles	<ol style="list-style-type: none">1. Measure angles with a protractor GZ92. Estimate angle measurements PHE
8.3.2: Classifying Angles	<ol style="list-style-type: none">1. Classify angles CD82. Identify complementary, supplementary, vertical, and adjacent angles HKG3. Find measures of complementary, supplementary, vertical, and adjacent angles CST

Also consider

- Lines, line segments, and rays JPE

8.3.3: Constructing Shapes

1. Find missing angles in triangles 4U6

8.3.4: Building Triangles

1. Triangle inequality 5RX
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Chapter 9

Circles and Volume

Section 9.1

Textbook section	IXL skills
9.1.1: Circumference, Diameter, and Pi	1. Parts of a circle 2VL 2. Circumference of circles KS7
9.1.2: Area of Circles	1. Area of circles YA8 2. Circles: word problems P56
9.1.3: Area of Composite Shapes	1. Area of semicircles and quarter circles 2NM 2. Area of complex figures involving circles EVS

Section 9.2

Textbook section	IXL skills
9.2.1: Surface Area and Volume	1. Bases of three-dimensional figures RF6 2. Surface area of cubes and prisms RFP 3. Volume of irregular figures made of unit cubes 7CP <i>Also consider</i> <ul style="list-style-type: none"> • Front, side, and top view 9Q3
9.2.2: Cross Sections	1. Cross sections of three-dimensional figures HFJ
9.2.3: Volume of a Prism	1. Relationship between volume and the area of the base: word problems 9SM 2. Volume of cubes and prisms URT 3. Volume of cubes and rectangular prisms: word problems 8WV
9.2.4: Volume of Non-Rectangular Prisms	1. Volume of compound figures 89U