



Math Connects

Concepts, Skills, and Problem Solving

Course 2

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REVERSE CORRELATION

Lesson	Grade Level Expectations
Unit 1 Algebra and Functions	
Chapter 1 Introduction to Algebra and Functions	
Reading to Solve Problems: Making Sense	Number and Operations 2B, 3C, 3D Algebraic Relationships 3A
1-1 A Plan for Problem Solving	Number and Operations 2B, 3C, 3D Algebraic Relationships 1B, 1C, 3A, 4A
1-2 Powers and Exponents	Number and Operations 1C, 2B, 3C
1-3 Squares and Square Roots	Number and Operations 1C, 2B, 2D, 3C Geometric and Spatial Relationships 4B
1-4 Order of Operations	Number and Operations 2B, 2C, 3C, 3D Algebraic Relationships 2A

Lesson	Grade Level Expectations
1-5 PSI: Guess and Check	Number and Operations 2C, 3C, 3D Algebraic Relationships 1B Measurement 1C
1-6 Algebra: Variables and Expression	Number and Operations 2C, 3C Algebraic Relationships 1C, 2A, 4A Geometric and Spatial Relationships 4B
1-7 Algebra: Equations	Number and Operations 2B, 2C, 3C, 3D Algebraic Relationships 2A, 3A
1-8 Algebra: Properties	Number and Operations 1C, 2C, 3C, 3D Algebraic Relationships 2B
1-9 Algebra: Arithmetic Sequences	Number and Operations 2B, 2C, 3C, 3D Algebraic Relationships 1B, 1C, 3A, 3A Geometric and Spatial Relationships 4B
Extend 1-9 Algebra Lab: Exploring Sequences	Number and Operations 3C, 3D Algebraic Relationships 1B, 1C, 2A, 3A, 4A Geometric and Spatial Relationships 4B
1-10 Algebra: Equations and Functions	Number and Operations 3C, 3D Algebraic Relationships 1B, 1C, 1D, 2A, 3A, 4A

Lesson	Grade Level Expectations
Extend 1-10 Graphing Calculator Lab: Functions and Tables	Number and Operations 3C Algebraic Relationships 1B, 1C, 1D, 2A, 3A, 4A
Chapter 2 Integers	
2-1 Integers and Absolute Value	Number and Operations 1A, 2B, 2C, 3C
2-2 Comparing and Ordering Integers	Number and Operations 1A
2-3 The Coordinate Plane	Number and Operations 1A Algebraic Relationships 3A Geometric and Spatial Relationships 4B
Explore 2-4 Algebra Lab: Adding Integers	Number and Operations 2B, 3C Geometric and Spatial Relationships 4B
2-4 Adding Integers	Number and Operations 1A, 2B, 2C, 3C
Explore 2-5 Algebra Lab: Subtracting Integers	Number and Operations 2B, 3C Geometric and Spatial Relationships 4B
2-5 Subtracting Integers	Number and Operations 1A, 2B, 2C, 3C
2-6 Multiplying Integers	Number and Operations 1A, 2B, 2C, 3C, 3D Algebraic Relationships 1B Geometric and Spatial Relationships 4B
2-7 PSI: Look for a Pattern	Algebraic Relationships 1B, 1C, 3A
2-8 Dividing Integers	Number and Operations 2B, 2C, 3C

Lesson	Grade Level Expectations
Chapter 3 Algebra: Linear Equations and Functions	
3-1 Writing Expressions and Equations	Number and Operations 3C, 3D Algebraic Relationships 2A, 3A
Explore 3-2 Algebra Lab: Solving Equations Using Models	Number and Operations 3C Algebraic Relationships 2A Geometric and Spatial Relationships 4B
3-2 Solving Addition and Subtraction Equations	Number and Operations 2C, 3C, 3D Algebraic Relationships 2A, 2B, 3A, 4A Geometric and Spatial Relationships 4B
3-3 Solving Multiplication Equations	Number and Operations 2C, 3C, 3D Algebraic Relationships 2A, 2B, 3A, 4A Geometric and Spatial Relationships 4B
3-4 PSI: Work Backward	Number and Operations 2B, 2C, 3C, 3D
3-5 Solving Two-Step Equations	Number and Operations 2B, 2C, 3C, 3D Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B
3-6 Measurement: Perimeter and Area	Number and Operations 2B, 2C, 3C, 3D Algebraic Relationships 2A, 3A, 4A Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
Explore 3-7 Measurement Lab: Representing Relationships	Number and Operations 2B, 2C, 3C, 3D Algebraic Relationships 1B, 1C, 1D, 2A, 3A, 4A Geometric and Spatial Relationships 4B
3-7 Functions and Graphs	Number and Operations 2C, 3C Algebraic Relationships 1B, 1C, 1D, 2A Measurement 2E
Extend 3-7 Graphing Calculator Lab: Graphing Relationships	Number and Operations 3C Algebraic Relationships 1B, 1D, 2A, 3A, 4A Measurement 2E
Unit 2 Number Sense: Fractions	
Chapter 4 Fractions, Decimals, and Percents	
Explore 4-1 Math Lab: Exploring Factors	Algebraic Relationships 1B, 1C, 4A Geometric and Spatial Relationships 4B
4-1 Prime Factorization	Number and Operations 1C Geometric and Spatial Relationships 4B
Reading to Solve Problems: Everyday Meaning	Number and Operations 1C
4-2 Greatest Common Factor	Number and Operations 1C, 3C Geometric and Spatial Relationships 4B
4-3 PSI: Make an Organized List	Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
4-4 Simplifying Fractions	Number and Operations 1B, 1C Geometric and Spatial Relationships 4B
4-5 Fractions and Decimals	Number and Operations 1B, 1C, 3C Algebraic Relationships 1B
4-6 Fractions and Percents	Number and Operations 1B, 1C, 3C Geometric and Spatial Relationships 4B
4-7 Percents and Decimals	Number and Operations 1B, 1C, 3C
4-8 Least Common Multiple	Number and Operations 1B, 1C, 3C Geometric and Spatial Relationships 4B
4-9 Comparing and Ordering Rational Numbers	Number and Operations 1A, 1B, 1C, 3C
Chapter 5 Applying Fractions	
5-1 Estimating with Fractions	Number and Operations 1A, 2B, 3C, 3D Geometric and Spatial Relationships 4B
5-2 Adding and Subtracting Fractions	Number and Operations 1B, 1C, 2B, 3C Geometric and Spatial Relationships 4B
5-3 Adding and Subtracting Mixed Numbers	Number and Operations 1B, 1C, 2B, 3C Geometric and Spatial Relationships 4B
5-4 PSI: Eliminate the Possibilities	Number and Operations 3C, 3D

Lesson	Grade Level Expectations
Explore 5-5 Math Lab: Multiplying Fractions	Number and Operations 1B, 1C, 2B, 3C Geometric and Spatial Relationships 4B
5-5 Multiplying Fractions and Mixed Numbers	Number and Operations 1B, 1C, 2B, 2C, 3C Geometric and Spatial Relationships 4B
5-6 Algebra: Solving Equations	Number and Operations 1B, 1C, 2B, 2C, 3C, 3E Algebraic Relationships 2A, 2B, 3A
Reading to Solve Word Problems: Meaning of Division	Number and Operations 2B, 3D Algebraic Relationships 3A
5-7 Dividing Fractions and Mixed Numbers	Number and Operations 1B, 1C, 2B, 3C Geometric and Spatial Relationships 4B
Unit 3 Algebra and Number Sense: Proportions and Percents	
Chapter 6 Rations and Proportions	
6-1 Ratios	Number and Operations 1B, 1C, 3E
6-2 Rates	Number and Operations 1A, 1B, 1C, 3E Algebraic Relationships 4A Measurement 2E
6-3 Rate of Change and Slope	Number and Operations 1B, 2C, 3C, 3E Algebraic Relationships 1B, 1D, 3A, 4A
6-4 Measurement: Changing Customary Units	Number and Operations 2B, 3C Measurement 2E

Lesson	Grade Level Expectations
6-5 Measurement: Changing Metric Units	Number and Operations 2B, 3C Measurement 2E
6-6 Algebra: Solving Proportions	Number and Operations 1A, 1B, 1C, 3C, 3E Algebraic Relationships 2A, 4A
Extend 6-6 Math Lab: Inverse Proportionality	Number and Operations 2B, 3C Algebraic Relationships 1B, 1C, 1D, 2A, 3A, 4A
6-7 PSI: Draw a Diagram	Number and Operations 2B, 3C, 3D Algebraic Relationships 1B, 3A, 4A Geometric and Spatial Relationships 4B
6-8 Scale Drawing	Number and Operations 2C, 3C, 3E Algebraic Relationships 2A Geometric and Spatial Relationships 3B, 4B Measurement 2C
Extend 6-8 Spreadsheet Lab: Scale Drawing	Number and Operations 2C, 3C, 3E Algebraic Relationships 3A Measurement 2E
6-9 Fractions, Decimals, and Percents	Number and Operations 1B, 1C, 2B, 3E Algebraic Relationships 2A, 3A

Lesson	Grade Level Expectations
Chapter 7 Applying Percents	
Explore 7-1 Math Lab: Percent of a Number	Number and Operations 1A Algebraic Relationships 3A Geometric and Spatial Relationships 4B
7-1 Percent of a Number	Number and Operations 1B, 1C, 3C
Reading to Solve Problems: Meaning of Percent	Number and Operations 3D Algebraic Relationships 3A
7-2 The Percent Proportion	Number and Operations 1A, 1B, 1C, 3C, 3E Algebraic Relationships 2A, 3A
7-3 Percents and Estimation	Number and Operations 1B, 2C, 3C, 3D Algebraic Relationships 1B
7-4 Algebra: The Percent Equation	Number and Operations 1B, 2C, 3C, 3D Algebraic Relationships 2A
7-5 PSI: Determine Reasonable Answers	Algebraic Relationships 3A, 4A Geometric and Spatial Relationships 4B
7-6 Percent of Change	Number and Operations 1B, 3C, 3E Geometric and Spatial Relationships 4B
7-7 Sales Tax and Discount	Number and Operations 1B, 2C, 3C Algebraic Relationships 2A, 2B, 3A

Lesson	Grade Level Expectations
7-8 Simple Interest	Number and Operations 2C, 3C Algebraic Relationships 2A, 2B, 3A
Extend 7-8 Spreadsheet Lab: Simple Interest	Number and Operations 2B, 2C, 3C Algebraic Relationships 2A
Unit 4 Statistics, Data Analysis, and Probability	
Chapter 8 Statistics: Analyzing Data	
8-1 Line Plots	Data and Probability 1C, 2A
8-2 Measures of Central Tendency and Range	Number and Operations 2C, 3C Geometric and Spatial Relationships 4B Data and Probability 1C, 2A
Extend 8-2 Graphing Calculator Lab: Mean and Median	Data and Probability 2A
8-3 Stem-and-Leaf Plots	Data and Probability 1C, 2A
8-4 Bar Graphs and Histograms	Data and Probability 1C, 2A
Extend 8-4 Spreadsheet Lab: Circle Graphs	Number and Operations 3D Geometric and Spatial Relationships 4B Data and Probability 1C, 2A
8-5 PSI: Use a Graph	Algebraic Relationships 1B, 1D, 3A Geometric and Spatial Relationships 4B Data and Probability 1C

Lesson	Grade Level Expectations
8-6 Using Graphs to Predict	Algebraic Relationships 1B, 1C, 1C, 3A, 4A Geometric and Spatial Relationships 4B Data and Probability 1C
Extend 8-6 Spreadsheet Lab: Multiple-Line and Bar Graphs	Algebraic Relationships 3A Data and Probability 1C
8-7 Using Data to Predict	Number and Operations 3C, 3E Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B Data and Probability 1C
8-8 Using Sampling to Predict	Number and Operations 3C Data and Probability 3A
8-9 Misleading Statistics	Algebraic Relationships 1B, 3A, 4A Geometric and Spatial Relationships 4B Data and Probability 1C, 2A
Chapter 9 Probability	
9-1 Simple Events	Number and Operations 1B, 3C, 3E Geometric and Spatial Relationships 4B Data and Probability 4A
9-2 Sample Spaces	Geometric and Spatial Relationships 4B Data and Probability 4A

Lesson	Grade Level Expectations
9-3 The Fundamental Counting Principle	Number and Operations 1B, 3C Geometric and Spatial Relationships 4B Data and Probability 4A
9-4 Permutations	Number and Operations 3C Geometric and Spatial Relationships 4B Data and Probability 4A
9-5 Combinations	Number and Operations 1B, 3C Geometric and Spatial Relationships 4B Data and Probability 4A
9-6 PSI: Act it Out	Algebraic Relationships 3A Data and Probability 4A
9-7 Theoretical and Experimental Probability	Number and Operations 1B Geometric and Spatial Relationships 4B Data and Probability 4A
Extend 9-7 Probability Lab: Simulations	Geometric and Spatial Relationships 4B Data and Probability 4A
9-8 Compound Events	Number and Operations 1B, 3C Algebraic Relationships 3A Geometric and Spatial Relationships 4B Data and Probability 4A

Lesson	Grade Level Expectations
Unit 5 Geometry and Measurement	
Chapter 10 Geometry: Polygons	
10-1 Angle Relationships	Geometric and Spatial Relationships 4B Measurement 2B
10-2 Complementary and Supplementary Angles	Algebraic Relationships 2A Geometric and Spatial Relationships 4B
10-3 Statistics: Display Data in a Circle Graph	Number and Operations 1B, 1C, 3C Algebraic Relationships 3A Geometric and Spatial Relationships 4B Data and Probability 1C
10-4 Triangles	Number and Operations 3C Algebraic Relationships 2A Geometric and Spatial Relationships 4B Measurement 2B
10-5 PSI: Use Logical Reasoning	Geometric and Spatial Relationships 4B
Explore 10-6 Geometry Lab: Investigating Quadrilaterals	Algebraic Relationships 1C Geometric and Spatial Relationships 2A, 4B Measurement 2B

Lesson	Grade Level Expectations
10-6 Quadrilaterals	Number and Operations 3C Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B Measurement 2B
10-7 Similar Figures	Number and Operations 1B, 3C, 3D, 3E Geometric and Spatial Relationships 1B, 4B
10-8 Polygons and Tessellations	Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B
Extend 10-8 Geometry Lab: Tessellations	Geometric and Spatial Relationships 4B
10-9 Translations	Geometric and Spatial Relationships 2A, 4B
10-10 Reflections	Geometric and Spatial Relationships 2A, 3C, 4B
Chapter 11 Measurement: Two-and Three-Dimensional Figures	
11-1 Area of Parallelograms	Number and Operations 3C Algebraic Relationships 2A Geometric and Spatial Relationships 4B
Explore 11-2 Measurement Lab: Triangles and Trapezoids	Number and Operations 2C, 3C Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
11-2 Area of Triangles and Trapezoids	Number and Operations 2C, 3C Algebraic Relationships 2A Geometric and Spatial Relationships 4B
Explore 11-3 Measurement Lab: Circumference of Circles	Algebraic Relationships 1B, 1C, 1D, 2A, 3A Geometric and Spatial Relationships 4B Measurement 2C
11-3 Circles and Circumference	Number and Operations 3C Algebraic Relationships 2B Geometric and Spatial Relationships 4B Measurement 2C
11-4 Area of Circles	Number and Operations 3C Algebraic Relationships 2B Geometric and Spatial Relationships 4B Measurement 2C
11-5 PSI: Solve a Simpler Problem	Number and Operations 3C Geometric and Spatial Relationships 4B
11-6 Area of Composite Figures	Number and Operations 3C Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
Extend 11-6 Measurement Lab: Nets and Surface Area	Number and Operations 3C Algebraic Relationships 1B, 3A, 4A Geometric and Spatial Relationships 1A 4B Measurement 1A, 2C, 2E
11-7 Three-Dimensional Figures	Geometric and Spatial Relationships 1A, 4B
Explore 11-8 Geometry Lab: Three-Dimensional Figures	Geometric and Spatial Relationships 1A, 4A, 4B
11-8 Drawing Three-Dimensional Figures	Geometric and Spatial Relationships 1A, 4A, 4B
11-9 Volume of Prisms	Number and Operations 3C Geometric and Spatial Relationships 1A, 4A, 4B Measurement 1A, 2C
11-10 Volume of Cylinders	Number and Operations 3C Geometric and Spatial Relationships 1A, 4A, 4B Measurement 1A, 2C
Extend 11-10 Graphing Calculator Lab: Graphing Geometric Relationships	Algebraic Relationships 1B, 1C, 1D, 2A, 3A, 4A Geometric and Spatial Relationships 4B
Chapter 12 Geometry and Measurement	
12-1 Estimating Square Roots	Number and Operations 1A, 2D
12-2 The Pythagorean Theorem	Number and Operations 2B, 2C, 2D, 3C, 3D Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
12-3 PSI: Make a Model	Number and Operations 3C Geometric and Spatial Relationships 1A, 4B
12-4 Surface Area of Rectangular Prisms	Number and Operations 2C, 2D, 3C Algebraic Relationships 2A Geometric and Spatial Relationships 1A, 4A, 4B Measurement 1B, 2C, 2E
Extend 12-4 Measurement Lab: Changes in Scale	Number and Operations 1B, 2B, 2C, 3C, 3E Algebraic Relationships 1B, 1C, 1D, 2A, 3A, 4A Geometric and Spatial Relationships 1A, 4A, 4B Measurement 2C
12-5 Surface Area of Cylinders	Number and Operations 2C, 3C Algebraic Relationships 2A Geometric and Spatial Relationships 1A, 4B Measurement 2C
Looking Ahead 1 Scientific Notation	Number and Operations 1C, 3C, 3D
Looking Ahead 2 Solving Multi-Step Equations	Number and Operations 2C, 3C Algebraic Relationships 2A, 2B, 3A, 4A
Looking Ahead 3 Parallel Lines and Transversals	Algebraic Relationships 2A, 3A Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
Looking Ahead 4 Congruent Polygons	Geometric and Spatial Relationships 1B, 4B
Looking Ahead 5 Converse of the Pythagorean Theorem	Number and Operations 2C, 3C, 3D Geometric and Spatial Relationships 4B
Looking Ahead 6 Box-and-Whisker Plots	Number and Operations 1A Data and Probability 1C, 2A