Department: Cocalico Connections Course: Math 7 Grade Level: 7

Outline for the course:

Operations with Rational Numbers

Operations with Integers

Integers and the Number Line Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How are integers used to represent real-world situations?

Summary

Review and connect what you learned.

Assignment

Practice representing integers.

Quiz Answers

Using Properties of Operations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use properties of operations to evaluate expressions?

Summarv

Review and connect what you learned.

Assignment

Solve a problem about planning a field trip, and write about your solution.

Quiz Answers

Adding Integers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you add integers in real-world situations?

Summary

Review and connect what you learned.

Assignment

Solve problems by adding integers and write about the solutions.

Quiz Answers

Subtracting Integers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you subtract integers in real-world situations?

Assignment

Investigate the distance between two integers.

Instruction

How can you subtract integers in real-world situations?

Summary

Review and connect what you learned.

Assignment

Solve problems about a lemonade stand, and write about the solutions.

Quiz Answers

Multiplying Integers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you multiply integers?

Summary

Review and connect what you learned.

Assignment

Practice multiplying integers.

Quiz Answers

Dividing Integers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you divide integers?

Summary

Review and connect what you learned.

Assignment

Practice dividing integers.

Quiz Answers

Operations with Integers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you simplify integer expressions that contain more than one operation?

Summary

Assignment

Practice using the order of operations.

Quiz Answers

Solving Problems Involving Integers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve real-world problems involving integers?

Summary

Review and connect what you learned.

Assignment

Write and evaluate expressions involving integers.

Quiz Answers

Operations with Decimals and Fractions

Adding and Subtracting Decimals Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How are decimals added and subtracted?

Summary

Review and connect what you learned.

Assignment

Practice adding and subtracting decimals.

Quiz Answers

Multiplying Decimals Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you find the product of positive and negative decimals?

Summary

Review and connect what you learned.

Assignment

Solve and write about multiplying decimals.

Quiz Answers

Dividing Decimals Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you find the quotient of positive and negative decimals?

Summary

Review and connect what you learned.

<u>Assignment</u>

Practice dividing decimals.

Quiz Answers

Solving Problems Involving Decimals Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you perform multiple operations on decimals?

Summarv

Review and connect what you learned.

Assignment

Practice working with decimal expressions.

Quiz Answers

Adding and Subtracting Fractions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you add and subtract positive and negative fractions?

Assianment

Explore adding and subtracting fractions.

Instruction

How do you add and subtract positive and negative fractions?

Summary

Review and connect what you learned.

Assignment

Practice adding and subtracting fractions.

Quiz Answers

Multiplying Fractions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you multiply positive and negative fractions?

Summary

Review and connect what you learned.

Assignment

Solve problems involving multiplying fractions and write about the solutions.

Quiz Answers

Dividing Fractions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you divide positive and negative fractions?

Summary

Review and connect what you learned.

<u>Assignment</u>

Practice dividing fractions.

Quiz Answers

Solving Problems Involving Rational Numbers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use the order of operations to solve real-world problems involving rational numbers?

Summary

Review and connect what you learned.

Assignment

Solve a real-world problem and write about the solution.

Quiz Answers

Expressions and Equations

Variable Expressions

<u>Understanding Expressions</u> <u>Guided Notes</u>

Warm-Up

Get ready for the lesson.

Instruction

What are algebraic expressions?

<u>Summary</u>

Review and connect what you learned.

<u>Assignment</u>

Practice solving problems involving expressions.

Quiz Answers

Writing Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you translate algebraic expressions?

Summary

Review and connect what you learned.

Assignment

Practice translating algebraic expressions.

Quiz Answers

Writing and Evaluating Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can an algebraic expression help you solve a real-world problem?

Summary

Review and connect what you learned.

Assignment

Practice evaluating algebraic expressions.

Quiz Answers

Using Properties to Simplify Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you tell if two expressions are equivalent?

Summary

Review and connect what you learned.

Assignment

Explore equivalent expressions.

Assignment

Practice using equivalent expressions.

Quiz Answers

Adding and Subtracting Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you add and subtract algebraic expressions?

Summary

Review and connect what you learned.

Assignment

Solve problems by adding and subtracting expressions, and write about the solutions.

Quiz Answers

Real-World Applications of Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you apply algebraic expressions to solve problems?

Summary

Assignment

Solve real-world problems involving expressions and write about the solutions.

Quiz Answers

Equations

Writing Equations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you translate words into equations?

Summary

Review and connect what you learned.

Assignment

Solve problems involving equations and write about the solutions.

Quiz Answers

Addition and Subtraction Equations Guided Notes

Warm-Up

Get ready for the lesson.

<u>Instruction</u>

How can you solve one-step addition and subtraction equations?

Summary

Review and connect what you learned.

<u>Assignment</u>

Solve problems involving addition and subtraction equations and write about the solutions.

Quiz Answers

Multiplication and Division Equations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve one-step multiplication and division equations?

Summary

Review and connect what you learned.

Assignment

Practice solving equations.

Quiz Answers

Solving Two-Step Equations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve a two-step equation?

Assignment

Explore solving two-step equations.

Instruction

How can you solve a two-step equation?

Summary

Review and connect what you learned.

Assignment

Practice solving two-step equations.

Quiz Answers

Equations in the Real World Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use equations to solve real-world problems?

Summary

Review and connect what you learned.

Assignment

Practice using equations to solve real-world problems.

Quiz Answers

Inequalities

Writing Inequalities Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you write inequalities?

Summary

Review and connect what you learned.

Assignment

Practice writing and interpreting inequalities.

Quiz Answers

Graphing Inequalities Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you graph an inequality?

Summary

Review and connect what you learned.

Assignment

Practice relating inequalities to their graphs.

Quiz Answers

Addition and Subtraction Inequalities Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve addition and subtraction inequalities?

Summary

Review and connect what you learned.

Assignment

Solve problems involving inequalities and write about the solutions.

Quiz Answers

Multiplication and Division Inequalities Guided Notes

Warm-Up

Get ready for the lesson.

Assignment

Explore properties of inequalities.

<u>Instructior</u>

How can you use multiplication and division to solve an inequality?

Summary

Review and connect what you learned.

Assignment

Practice solving inequalities.

Quiz Answers

Solving Two-Step Inequalities Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve two-step inequalities?

Summary

Review and connect what you learned.

<u>Assignment</u>

Practice solving problems involving two-step inequalities.

Quiz Answers

Inequalities in the Real World Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can inequalities be used to solve real-world problems?

Summary

Review and connect what you learned.

Assignment

Cocalico School District

Year-at-a-Glance - Curriculum Overview

Solve real-world problems involving inequalities and write about the solutions.

Proportional Relationships

Rates and Proportions

Unit Rates Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can unit rates and proportional reasoning be used to solve problems?

Summary

Review and connect what you learned.

Assignment

Practice with ratios, unit rates, and proportional reasoning.

Quiz Answers

Finding a Constant of Proportionality Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you describe a proportional relationship with a number?

Summary

Review and connect what you learned.

Assignment

Practice finding the constant of proportionality.

Quiz Answers

Applications of Unit Rates Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How are unit rates used in the real world?

Summary

Review and connect what you learned.

Assignment

Solve and write about real-world unit rate problems.

Quiz Answers

Graphing Proportional Relationships Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can graphs on the coordinate plane represent proportional relationships?

Summary

Assignment

Solve and write about proportions with graphs.

Quiz Answers

Identifying Proportional Relationships Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can proportional relationships be identified in tables and graphs?

Summary

Review and connect what you learned.

Assignment

Practice analyzing relationships to determine proportionality.

Quiz Answers

Equations of Proportional Relationships Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you represent proportional relationships?

Summary

Review and connect what you learned.

Assignment

Explore how to represent proportional relationships.

Assignment

Practice representing proportional relationships in different ways.

Quiz Answers

Proportions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use proportions to solve problems?

Summary

Review and connect what you learned.

Assignment

Solve problems about a recipe and write about the solutions.

Quiz Answers

Cross Products Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What are cross products, and how do they relate to proportions?

Summary

Review and connect what you learned.

<u>Assignment</u>

Solve problems involving proportions and write about the solutions.

Quiz Answers

Percents and Proportions

Introduction to Percents Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use different forms of a number to solve percent problems?

Summary

Review and connect what you learned.

Assignment

Solve and write about problems involving percents.

Quiz Answers

Finding a Percent of a Number Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use expressions to find the percent of a number?

Summary

Review and connect what you learned.

Assignment

Solve a problem about repairing computers and write about the solution.

Quiz Answers

Estimating with Percents Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you estimate with percents?

Summary

Review and connect what you learned.

Assignment

Solve and write about an estimation problem using percent.

Quiz Answers

Finding a Total Amount Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use expressions and diagrams to find total amounts in percent problems?

Summary

Review and connect what you learned.

<u>Assignment</u>

Solve and write about total amounts in percent problems.

Quiz Answers

Markups and Markdowns Guided Notes

Warm-Up

Get ready for the lesson.

Assignment

Markups and Markdowns

Instruction

How can you find the price after a markup or markdown?

Summary

Review and connect what you learned.

Assignment

Find the markup and markdown prices.

Quiz Answers

Finding an Original Amount Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find the original amount in real-world percent problems?

Summary

Review and connect what you learned.

Assignment

Solve problems about selling cameras and write about the solutions.

Quiz Answers

Simple Interest Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is simple interest and how is it used every day?

Summary

Review and connect what you learned.

<u>Assignment</u>

Practice using the simple interest formula.

Quiz Answers

Percent Increase and Decrease Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can a percent be used to describe a change in quantity?

Summary

Review and connect what you learned.

<u>Assignment</u>

Practice finding percent change.

Quiz Answers

Applications of Percent Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you solve real-world problems that involve multiple percents?

Summary

Review and connect what you learned.

Assignment

Practice solving percent problems.

Quiz Answers

Geometry

Scale and Proportion

Scale Factor Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How is proportional reasoning used to solve scale drawing problems?

Summary

Review and connect what you learned.

<u>Assignment</u>

Practice finding dimensions using scale factors.

Quiz Answers

Determining a Scale Factor Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you determine a scale factor and use it to find other measures?

Summary

Review and connect what you learned.

Assignment

Explore the scale factor of scale drawings.

Assignment

Practice finding a scale factor and using it to find missing measures.

Quiz Answers

Solving Scale Problems Using Proportions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you use proportions to calculate missing dimensions in scale drawings?

Summary

Review and connect what you learned.

Assignment

Practice using proportions to find missing measures.

Quiz Answers

Scale Drawings and Area Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve area problems with scale drawings?

Summary

Review and connect what you learned.

Assignment

Practice solving area problems with scale drawings.

Quiz Answers

Changing a Scale Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How does changing the scale factor affect the scale drawing and actual dimensions?

Summary

Review and connect what you learned.

Assignment

Solve and write about how changing the scale factor affects the model and the actual dimensions.

Quiz Answers

Two-Dimensional Geometry

Angle Relationships Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use angle relationships to find unknown angles?

Summary

Review and connect what you learned.

Assignment

Practice analyzing angle-pair relationships.

Quiz Answers

Parallel Lines Cut by a Transversal Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What angle relationships exist when parallel lines are cut by a transversal?

Summary

Review and connect what you learned.

Assignment

Solve problems involving parallel lines cut by a transversal and write about your results.

Quiz Answers

Finding Unknown Angle Measures Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use angle relationships to find unknown measures in a figure?

Summary

Review and connect what you learned.

Assignment

Practice using angle relationships.

Quiz Answers

Constructing Triangles Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you determine whether given measures will create a triangle?

Assignment

Explore the sides and angles of triangles.

Instruction

How can you determine whether given measures will create a triangle?

Summary

Review and connect what you learned.

Assignment

Practice constructing triangles with given dimensions.

Quiz Answers

Circumference Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is circumference of a circle and how is it used to solve problems?

Summary

Review and connect what you learned.

Assignment

Solve problems with circumference of coins and write about the solutions.

Quiz Answers

Area of Polygons Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve problems involving area of polygons?

Summary

Review and connect what you learned.

Assignment

Solve problems to find the areas of parks, and write about the solutions.

Quiz Answers

Area of a Circle Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you find the area of a circle and use it to solve problems?

Summary

Review and connect what you learned.

Assignment

Solve problems involving area of tables and write about the solutions.

Quiz Answers

Area of Composite Figures Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve problems involving area of composite figures?

<u>Assignment</u>

Explore how to decompose a figure to find its area.

Instruction

How can you solve problems involving area of composite figures?

Summary

Assignment

Solve and write about area of swimming pools.

Quiz Answers

Three-Dimensional Geometry

Surface Area of Prisms Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you find the surface area of prisms?

Summary

Review and connect what you learned.

Assignment

Explore rectangular and triangular prisms and their two-dimensional nets.

Assignment

Practice recognizing and finding the surface area of rectangular and triangular prisms.

Quiz Answers

Volume of Prisms Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you calculate the volume of a prism?

Summary

Review and connect what you learned.

Assignment

Practice solving problems involving the volume of prisms.

Quiz Answers

Statistics and Probability

Probability

<u>Understanding Probability</u> <u>Guided Notes</u>

Warm-Up

Get ready for the lesson.

Instruction

How can you represent the likelihood that an event will happen?

Summary

Review and connect what you learned.

Assignment

Practice determining the probability of events.

Quiz Answers

Theoretical Probability Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is theoretical probability and how can you use it to make predictions?

Summary

Review and connect what you learned.

Assignment

Solve and write about theoretical probabilities.

Quiz Answers

Experimental Probability Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is experimental probability?

Summary

Review and connect what you learned.

Assignment

Practice using experimental probability.

Quiz Answers

Experimental vs. Theoretical Probability Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is the difference between theoretical probability and experimental probability?

Assignment

Explore the relationship between experimental and theoretical probability using probability models.

Instruction

What is the difference between theoretical probability and experimental probability?

Summary

Review and connect what you learned.

Assignment

Practice with probabilities.

Quiz Answers

Compound Events and Sample Space Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find all possible outcomes of an experiment?

<u>Summary</u>

Assignment

Solve problems involving compound events and write about the solutions.

Quiz Answers

Probability of Compound Events Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you calculate the probability for a compound event?

Summary

Review and connect what you learned.

Assignment

Solve problems involving compound events and write about the solutions.

Quiz Answers

Statistics

Populations and Sampling Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is a sample of a population?

Summary

Review and connect what you learned.

Assignment

Practice exploring populations and samples.

Quiz Answers

Sampling Methods Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is random sampling, and how is it used in statistics?

Summary

Review and connect what you learned.

Assignment

Practice with sampling methods.

Quiz Answers

Inferences and Predictions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use random samples to draw inferences about a population?

Summary

Review and connect what you learned.

Assignment

Solve problems involving inferences and sample size and write about the solutions.

Comparing Measures of Center and Variability Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you compare measures of center and variability of two sets of data?

Summary

Review and connect what you learned.

<u>Assignment</u>

Solve problems by comparing two sets of data, and write about the solutions.

Quiz Answers

Comparing Populations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you compare populations using measures of center and variability?

Summary

Review and connect what you learned.

% of Course Time: Self-paced, to cover all topics in the outline from above

Textbooks & Supplemental Materials: Edgenuity lessons, supplemented by Cocalico Teachers of Record

Assessments: Edgenuity guizzes and tests, performance tasks

Standards Addressed: Contact the Online Learning Facilitator for a supplemental document from Edgenuity outlining any applicable PA Standards address in the course topics. Note that for some courses, there are no PA Standards which may exist.



Eagle P.A.C.T. Course Connections:

Online Learning courses help to prepare students for the diverse ways in which they will learn outside of school. The self-paced, independent nature of virtual courses also helps to develop important skills such as self-advocacy, time management, organization, study skills, and self-discipline. Such skills are needed for a successful future.