

Learning Targets

Rational Numbers

Lesson 1: Positive and Negative Numbers

- I can explain what 0, positive numbers, and negative numbers mean in the context of temperature and elevation.
- I can use positive and negative numbers to describe temperature and elevation.
- I know what positive and negative numbers are.

Lesson 2: Comparing Positive and Negative Numbers

- I can explain how to use the positions of numbers on a number line to compare them.
- I can explain what a rational number is.
- I can use inequalities to compare positive and negative numbers.
- I understand what it means for numbers to be opposites.

Lesson 3: Ordering Rational Numbers

- I can compare and order rational numbers.
- I can use phrases like “greater than,” “less than,” and “opposite” to compare rational numbers.

Lesson 4: Absolute Value of Numbers

- I can explain what the absolute value of a number is.
- I can find the absolute values of rational numbers.
- I can recognize and use the notation for absolute value.

Lesson 5: Comparing Numbers and Distance from Zero

- I can explain what absolute value means in situations involving elevation.
- I can use absolute values to describe elevations.
- I can use inequalities to compare rational numbers and the absolute values of rational numbers.

Lesson 6: Changing Temperatures

- I can use a number line to add positive and negative numbers.

Lesson 7: Changing Elevation

- I understand how to add positive and negative numbers in general.

Lesson 8: Money and Debts

- I understand what positive and negative numbers mean in a situation involving money.

Lesson 9: Representing Subtraction

- I can explain the relationship between addition and subtraction of rational numbers.
- I can use a number line to subtract positive and negative numbers.

Lesson 10: Subtracting Rational Numbers

- I can find the difference between two rational numbers.
- I can solve problems that involve adding and subtracting rational numbers.
- I understand how to subtract positive and negative numbers in general.

Lesson 11: Constructing the Coordinate Plane

- I can plot points with negative coordinates in the coordinate plane.
- I know what negative numbers in coordinates tell us.
- When given points to plot, I can construct a coordinate plane with an appropriate scale and pair of axes.

Lesson 12: Interpreting Points on a Coordinate Plane

- I can explain how rational numbers represent balances in a money context.
- I can explain what points in a four-quadrant coordinate plane represent in a situation.
- I can plot points in a four-quadrant coordinate plane to represent situations and solve problems.

Lesson 13: Distances and Shapes on the Coordinate Plane

- I can find horizontal and vertical distances between points on the coordinate plane.
- I can plot polygons on the coordinate plane when I have the coordinates for the vertices.

Lesson 14: Position, Speed, Direction

- I can explain what it means when time is represented with a negative number in a situation about speed and direction.
- I can multiply two negative numbers.
- I can use rational numbers to represent speed and direction.

Lesson 15: Multiplying Rational Numbers

- I can solve problems that involve multiplying rational numbers.

Lesson 16: Dividing Rational Numbers

- I can divide rational numbers.

Lesson 17: Negative Rates

- I can solve problems that involve multiplying and dividing rational numbers.
- I can solve problems that involve negative rates.

Lesson 18: Expressions with Rational Numbers

- I can add, subtract, multiply, and divide rational numbers.
- I can evaluate expressions that involve rational numbers.

Lesson 19: Solving Equations with Rational Numbers

- I can solve equations that include rational numbers and have rational solutions.

Lesson 20: Representing Contexts with Equations

- I can explain what the solution to an equation means for the situation.
- I can write and solve equations to represent situations that involve rational numbers.

Lesson 21: Drawing on the Coordinate Plane

- I can use ordered pairs to draw a picture.

Lesson 22: The Stock Market

- I can solve problems about the stock market using rational numbers and percentages.