

Objective

By the end of this lesson, Brooklynne will be able to understand and apply the concepts of ratios and proportions in real-life situations, enhancing her problem-solving skills and mathematical reasoning.

Materials and Prep

- Paper and pencil for calculations and notes
- A timer or stopwatch for timed activities
- Everyday items for ratio examples (e.g., fruits, toys, or books)

Before the lesson, review the definitions of ratios and proportions, as well as how to simplify fractions, since these concepts will be fundamental during the activities.

Activities

- **Ratio Scavenger Hunt:**

Brooklynne will go around the house or yard to find items that can be grouped into ratios. For example, she could find 2 apples and 3 oranges, and express this as a ratio of 2:3. This activity helps her visualize and understand ratios in everyday life.

- **Proportion Puzzles:**

Create simple word problems that involve proportions, such as "If 3 apples cost \$1.50, how much would 5 apples cost?" Brooklynne will solve these problems using cross-multiplication to find the answers, reinforcing her understanding of proportions.

- **Cooking with Ratios:**

Choose a simple recipe that requires ratios, like making lemonade. For example, if the recipe calls for 1 part lemon juice to 4 parts water, Brooklynne can practice measuring out the ingredients based on different quantities, reinforcing the concept of ratios in a fun and practical way.

Talking Points

- "A ratio compares two quantities, showing how much of one thing there is compared to another. Can you think of a real-life example of a ratio?"
- "Proportions are equations that show two ratios are equal. For example, if we know that 2:4 is the same as 1:2, how can we use this to solve problems?"
- "When we encounter a problem with proportions, we can use cross-multiplication to find the missing value. Let's practice this together!"
- "Ratios and proportions are everywhere in our daily lives, from cooking to shopping. How do you think understanding these concepts can help you in real life?"