2nd Grade Math: Adding and Subtracting Like Fractions

What Are Like Fractions?

Like fractions are fractions that have the same denominator. This makes it easy to add or subtract them because you only need to focus on the numerators.

Example: $\frac{2}{5}$ and $\frac{3}{5}$ are like fractions because they both have a denominator of 5.

Adding Like Fractions

To add like fractions:

1. **Keep the denominator the same.**
2. **Add the numerators.**
3. **Simplify the fraction if needed.**

Example: Add $\frac{2}{5} + \frac{3}{5}$

- **Step 1**: Keep the denominator (5).
- **Step 2**: Add the numerators: $2 + 3 = 5$.
- **Step 3**: Write the new fraction: $\frac{5}{5}$.
- **Step 4**: Simplify: $\frac{5}{5} = 1$.

Subtracting Like Fractions

To subtract like fractions:

1. **Keep the denominator the same.**
2. **Subtract the numerators.**
3. **Simplify the fraction if needed.**

Example: Subtract $\frac{4}{7} - \frac{2}{7}$

- **Step 1**: Keep the denominator (7).
- **Step 2**: Subtract the numerators: $4 - 2 = 2$.
- **Step 3**: Write the new fraction: $\frac{2}{7}$.

Practice Problems

1. **Adding Like Fractions**:
   - **Problem**: $\frac{1}{6} + \frac{2}{6}$
     - **Solution**: Keep the denominator (6). $1 + 2 = 3 \rightarrow \frac{3}{6} \rightarrow$ Simplify to $\frac{1}{2}$.
2. **Subtracting Like Fractions**:
   - **Problem**: $\frac{5}{9} - \frac{3}{9}$
     - **Solution**: Keep the denominator (9). $5 - 3 = 2 \rightarrow \frac{2}{9}$.
3. **Adding and Simplifying**:
   - **Problem**: $\frac{3}{10} + \frac{4}{10}$
     - **Solution**: Keep the denominator (10). $3 + 4 = 7 \rightarrow \frac{7}{10}$.
4. **Subtracting and Checking**:
   - **Problem**: $\frac{6}{8} - \frac{2}{8}$
     - **Solution**: Keep the denominator (8). $6 - 2 = 4 \rightarrow \frac{4}{8} \rightarrow$ Simplify to $\frac{1}{2}$.

Why Is Adding and Subtracting Like Fractions Important?

- **Real-Life Applications**: Helps in cooking, sharing, and dividing things equally.
- **Foundation for Future Math**: Understanding how to work with like fractions is essential for learning about unlike fractions and more complex operations.

Conclusion

Adding and subtracting like fractions is a straightforward process that builds confidence in working with fractions. With practice, students will be able to add and subtract fractions easily!