Addition and Subtraction of Fractions



B. Write the Missing Terms to Complete the Sentences:

- 1. To add or subtract fractions with unlike denominators, we first make the denominators _____.
- 2. $\frac{4}{7} + \frac{2}{7} =$ _____. 3. $\frac{5}{6} - \frac{5}{6} =$ _____.
- 4. The difference between $\frac{3}{4}$ and $\frac{1}{4}$ is _____.
- 5. $\frac{2}{5} + \frac{3}{5} =$ _____, which is equal to _____.

C. Figure out the answers to these questions:

- 1. Add: $\frac{1}{3} + \frac{2}{3}$. Show your steps clearly.
- 2. Subtract: $\frac{5}{8} \frac{3}{8}$ using a visual model.

- 3. Solve: $\frac{3}{4} + \frac{2}{5}$. Show how you find a common denominator.
- 4. Write a real-life situation where two fractions are added (e.g., lengths, food).
- 5. Use a number line to show $\frac{1}{4} + \frac{1}{2}$.
- 6. **Subtract:** $\frac{7}{10} \frac{1}{2}$. Give your answer in simplest form.
- 7. Create a word problem that involves subtraction of two fractions.
- 8. Explain in a few lines why finding the LCM of denominators is important in adding fractions.

D. Mark each sentence with a True (\checkmark) or False (X):

1. You can add fractions directly if their denominators are the same.

$$2. \frac{1}{2} + \frac{1}{3} = \frac{2}{5}.$$

- 3. When subtracting fractions, only subtract the numerators.
- $4.\,\frac{4}{4}\,-\frac{2}{4}\,=\frac{2}{4}.$
- 5. Fractions must be converted to like terms before addition or subtraction.

E. Challenge yourself with these questions:

- 1. Add: $\frac{5}{12} + \frac{7}{12}$.
- 2. **Subtract:** $\frac{11}{15} \frac{4}{15}$.
- 3. **Solve:** $\frac{3}{5} + \frac{1}{4}$. Simplify your answer.
- 4. Add the following fractions: $\frac{1}{6} + \frac{2}{3} + \frac{1}{2}$
- 5. Write two different pairs of fractions that add up to 1.
- 6. Create a picture problem that represents 4/5 2/5 and solve it.
- 7. Add: $1\frac{1}{2} + 2\frac{3}{4}$ and give your answer as a mixed number.
- F. Simplify
 - 1. $4\frac{1}{10} 2\frac{3}{5} + 3\frac{1}{8}$ 2. $6\frac{1}{2} + 2\frac{3}{3} + 1\frac{1}{4}$ 3. $9\frac{1}{5} 2\frac{3}{4} + 2\frac{7}{10}$
- **G.** Rajneesh swims for 8 $\frac{1}{2}$ hours during the school week and 6 $\frac{3}{4}$ hours on weekends. How much time does he swim each week in all?