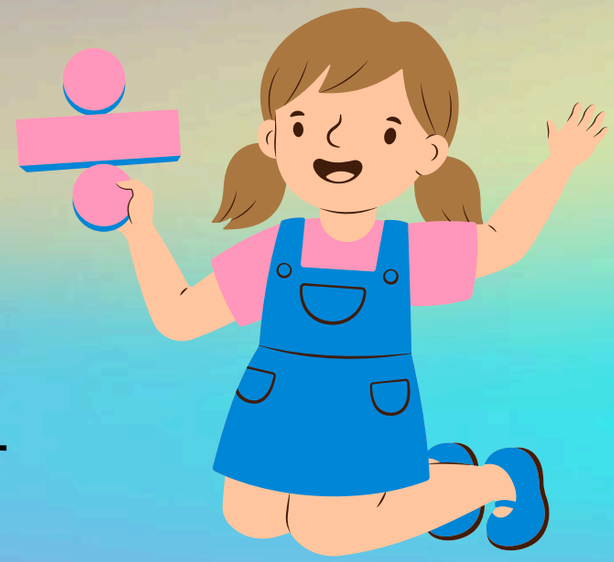
Add Simple and Mixed Fractions with Regrouping or without Regrouping

When you add simple fractions that are similar, just add the top numbers (numerators) and keep the same bottom number (denominator). Then simplify the fractions after that.

Example: $\frac{1}{4} + \frac{3}{4}$

Solution: $\frac{1}{4} + \frac{3}{4} = \frac{1+3}{4} = 1$

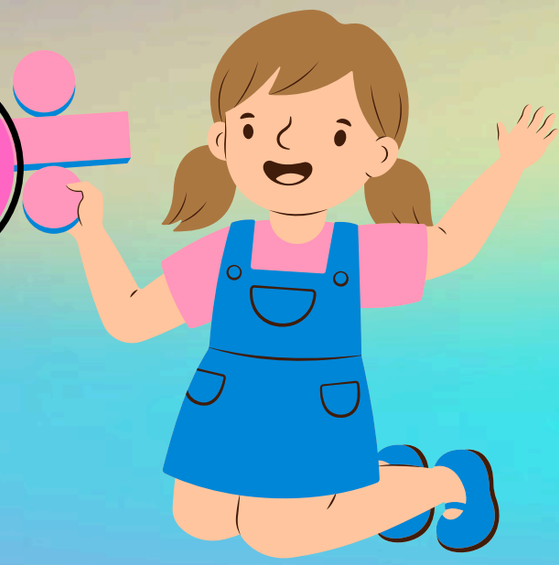


To add dissimilar fractions, first change them into similar fractions by finding equivalent fractions.

Example: $\frac{2}{7} + \frac{4}{3}$

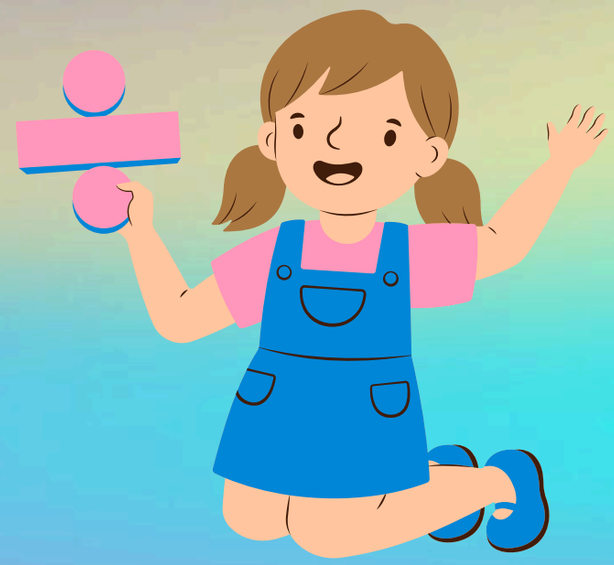
Solution: $\frac{2}{7} + \frac{4}{3} = \frac{2 \times 3}{7 \times 3} = \frac{6}{21} + \frac{4 + 7}{3 + 7} = \frac{28}{21}$

$$\boxed{\frac{6 + 28}{21} = \frac{34}{21}}$$



If the result is an improper fraction, change it into a mixed number.

$$\frac{34}{21} \quad \text{or} \quad 1\frac{13}{21}$$



If you know how to add similar and dissimilar fractions, you can easily add mixed numbers too. Just add the whole numbers together and then add the fraction parts.

$$1\frac{1}{7} + 3\frac{2}{7} = (1+3) + (\frac{1+2}{7})$$

$$4 + \frac{3}{7} = 4\frac{3}{7}$$

Therefore $1\frac{1}{7} + 3\frac{2}{7} = 4\frac{3}{7}$