

Complex Fractions Two basic strategies for simplifying:

Method A: Simplify the numerator and denominator of the big fraction as much as possible, then divide. Remember that $\frac{a}{b} = a \div b$ and dividing by a fraction means multiplying by its reciprocal.

Method B: Multiply the numerator and denominator of the big fraction by the LCM of all the little fractions (to **clear their denominators**), then simplify what remains.

Example: $\frac{\frac{7}{4} + \frac{5}{8}}{3 - \frac{5}{6}}$

Method A: simplify the numerator and denominator of the big fraction first.

$$\frac{7}{4} + \frac{5}{8} =$$

$$3 - \frac{5}{6} =$$

$$\text{So } \frac{\frac{7}{4} + \frac{5}{8}}{3 - \frac{5}{6}} =$$

Method B: first find the LCM of all the denominators of the little fractions,

LCM=

$$\frac{\square\left(\frac{7}{4}\right) + \square\left(\frac{5}{8}\right)}{\square(3) - \square\left(\frac{5}{6}\right)}$$