

Adding/Subtracting Fractions w/ Like Unlike Denominators (5-3)

Adding & Subtracting Fractions	
Step 1	Find the <u>LCD</u> and rewrite the fractions.
Step 2	<u>add</u> or <u>subtract</u> the fractions.
Step 3	<u>simplify</u> as needed.

Example 1: Add/subtract the fractions.

I Do	You Do
$\frac{3}{14} + \frac{-6}{7} =$ $\frac{3}{14} + \frac{-12}{14} = \boxed{\frac{-9}{14}}$	$\frac{-49}{5 \cdot 9} + \frac{4 \cdot 5}{9 \cdot 5} =$ $\frac{-36}{45} - \frac{20}{45}$ $\frac{-36 + (-20)}{45} = \frac{-56}{45}$ $\boxed{-\frac{11}{45}}$

Example 2: Add/subtract the fractions.

I Do	You Do
$-5\frac{4}{5} + -11\frac{4}{9} =$ $-5\frac{36}{45} + -11\frac{20}{45}$ $-16\frac{56}{45}$ $-16 + -1\frac{11}{45}$ $\boxed{-17\frac{11}{45}}$	$22\frac{11 \cdot 4}{12 \cdot 4} - 17\frac{3 \cdot 3}{16 \cdot 3}$ $22\frac{44}{48} - 17\frac{9}{48}$ $\boxed{5\frac{35}{48}}$

Example 3: Apply your knowledge of fractions.

I Do	You Do
<p>You have $12\frac{9}{10}$ inches of red string. If you have $15\frac{5}{6}$ inches of yellow string, how much string do you have altogether?</p> $12\frac{27}{30} + 15\frac{25}{30}$ $27\frac{52}{30}$ $27 + 1\frac{22}{30} \div 2$ $\boxed{28\frac{11}{15} \text{ inches}}$	<p>You are hiking a trail that is $10\frac{11}{12}$ miles long. If you have hiked $5\frac{5}{6}$ miles of it, how much do you have left?</p> $10\frac{11}{12} - 5\frac{5}{6}$ $10\frac{11}{12} - 5\frac{10}{12}$ $\boxed{5\frac{1}{12} \text{ miles}}$

Example 4: Add/subtract the fractions.

I Do	You Do
$\frac{7 \cdot 2}{15a} + \frac{-5 \cdot 5}{6a} =$ $\frac{14}{30a} + \frac{-25}{30a} = \boxed{\frac{-11}{30a}}$	$\frac{12c \cdot 2}{17} - \frac{3c}{34} =$ $\frac{24c}{34} - \frac{3c}{34} = \boxed{\frac{21c}{34}}$