Subtracting Fractions With Unlike Denominators

You can subtract fractions with unlike denominators. Start by making equivalent fractions using the least common denominator, and then subtract the fractions. Let's try it! Solve $\frac{3}{5} - \frac{1}{4}$.

First, find the least common denominator. The least common denominator (LCD) is the smallest common multiple of both denominators. For this problem, the LCD is 20. Now, multiply to make equivalent fractions with a denominator of 20.

 $\frac{3\times4}{5\times4} = \frac{12}{20} \qquad \qquad \frac{1\times5}{4\times5} = \frac{5}{20}$

 $\frac{12}{20} - \frac{5}{20} = \frac{7}{20}$

Next, subtract the fractions. Subtract the numerators and keep the denominator the same. Make sure your answer is in simplest form.

Try it yourself! Subtract. Show your work and write your final answer in simplest form.

$\frac{1}{2} - \frac{1}{3} =$	$\frac{3}{6} - \frac{2}{6} = \frac{1}{6}$	$\frac{7}{12} - \frac{1}{4} =$	$\frac{7}{12} - \frac{3}{12} = \frac{4}{12} = \frac{1}{3}$
$\frac{8}{9} - \frac{1}{2} =$	$\frac{16}{18} - \frac{9}{18} = \frac{7}{18}$	$\frac{7}{10} - \frac{3}{5} =$	$\frac{7}{10} - \frac{6}{10} = \frac{1}{10}$
$\frac{5}{6} - \frac{2}{5} =$	$\frac{25}{30} - \frac{12}{30} = \frac{13}{30}$	$\frac{5}{12} - \frac{3}{8} =$	$\frac{10}{24} - \frac{9}{24} = \frac{1}{24}$
$\frac{6}{7} - \frac{5}{9} =$	$\frac{54}{63} - \frac{35}{63} = \frac{19}{63}$	$\frac{3}{4} - \frac{3}{10} =$	$\frac{15}{20} - \frac{6}{20} = \frac{9}{20}$