

Subtracting Fractions

When you are adding two fractions that do not have a common denominator and you cannot easily change one of the fractions to the other's denominator, follow these steps on this problem:

$$\frac{4}{7} - \frac{2}{5}$$

The common denominator for the above problem is $7 \times 5 = 35$. We arrive at this number by multiplying the denominator of the 1st fraction (7) and the denominator of the 2nd fraction (5).

Write down the new problem as:

$$\frac{\quad}{35} - \frac{\quad}{35}$$

To find the denominator, for the 1st fraction, write:

$$\frac{4}{7} = \frac{\quad}{35}$$

Now 7 times what number equals 35? Five, **exactly!** Now, whatever you multiply on the bottom, go ahead and multiply on the top. So $4 \times 5 = 20$ as you can see below.

$$\frac{4}{7} \times \frac{5}{5} = \frac{20}{35}$$

To find the denominator, for the 2nd fraction, write:

$$\frac{2}{5} = \frac{\quad}{35}$$

At this time, 5 times what number equals 35? Seven, **yes!** Now, whatever you multiply on the bottom, go ahead and multiply on the top. So $2 \times 7 = 14$ as you can see below.

$$\frac{2}{5} \times \frac{7}{7} = \frac{14}{35}$$

Place the new numerators over the denominators on your paper and now you solve the problem.

$$\frac{20}{35} - \frac{14}{35} = \frac{6}{35}$$

$20 - 14 = 6$ as the denominator stays as 35. The answer is $\frac{6}{35}$.

Solve the following 10 subtraction problems:

$$\frac{1}{2} - \frac{1}{5}$$

$$\frac{3}{4} - \frac{1}{3}$$

$$\frac{9}{10} - \frac{3}{4}$$

$$\frac{7}{8} - \frac{2}{5}$$

$$\frac{4}{9} - \frac{1}{5}$$

$$\frac{2}{7} - \frac{3}{12}$$

$$\frac{6}{7} - \frac{2}{3}$$

$$\frac{7}{12} - \frac{2}{5}$$

$$\frac{1}{2} - \frac{3}{10}$$

$$\frac{4}{5} - \frac{3}{4}$$