Example 1:

Add $\dfrac{1}{15}$ and $\dfrac{7}{10}$

Solution:

Step 1: Find primes of each denominator.

$$15 = 5 \times 3$$
$$10 = 5 \times 2$$

Step 2: In the example, 15 is the largest denominator, so use the 5 and the 3; now look at the second denominator's primes—the five already appears in the list, but the 2 does not, so use the 2.

$$5 \times 3 \times 2 = 30$$

Step 3: Rewrite with least common denominators.

$$\dfrac{1}{15} = \dfrac{2}{30}$$

$$\dfrac{7}{10} = \dfrac{21}{30}$$

Step 4: Add the new fractions.

$$\dfrac{2}{30} + \dfrac{21}{30} = \dfrac{23}{30}$$