

Is there a better way to add and subtract fractions that do not have like denominators? Absolutely!! In recent years, teachers have developed a new method to solve fractions that do not have like denominators. Remember the old days when you had to go through the process of finding the GCF, or Greatest Common Factor, and then multiply to get equivalent fractions? Well, these teachers have simplified the process!!

First, you will need to cross-multiply the two fractions. Let's use $\frac{1}{2}$ plus $\frac{3}{4}$. I would cross-multiply the 2 and the 3 (the two coming from the denominator of $\frac{1}{2}$ and the 3 coming from the numerator of $\frac{3}{4}$). I would then cross multiply the 1 and the 4 (the 1 coming from the numerator of $\frac{1}{2}$ and the 4 coming from the denominator of $\frac{3}{4}$).

After I cross multiply the two fractions. I need to look at the symbol in-between the two fractions. Is it an addition sign, or is it a subtraction sign? In this case, $\frac{1}{2}$ plus $\frac{3}{4}$, I am suppose to add, so I will add my two answers together, that I got from cross multiplying. My first answer, 2×3 is 6. My second answer is 1×4 which is 4. I will add the 6 and the 4 together to get 10.

My next step is to multiply the two denominators together. My denominators are 2 and 4, which would equal 8. I would place the 8 on top as my numerator, and the 10 on the bottom as my denominator. Now, I have $\frac{8}{10}$. However, I need to reduce my fraction.

In order to reduce the fraction, I need to ask myself three questions:

1. Is my numerator half of my denominator? In this example, 8 is not half of 10.
2. Will my numerator go into my denominator evenly? In this case, no.
3. Do both my numerator and denominator have common factors? Yes.

If I do not know the greatest common factor off the top of my head, I will need to factor both my numerator and denominator. In this case, my numerator 8 has the common denominator of 2, so does the 10. When I divide by two on the top and the bottom, I get the fraction, $\frac{4}{5}$, which is in its lowest term.

This method sounds a bit confusing at first, but once you get the hang of solving these problems, I guarantee you will enjoy solving these problems using this new method, rather than using the old method.