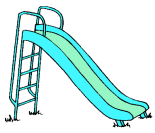


Slide Method

Step 1 - List the first 5 **Prime Numbers**

(2, 3, 5, 7, 11)

Step 2 - Put your fraction in the **"slide"** $\frac{15}{60}$
(looks like upside down division bar)

Step 3 - Start with the smallest **Prime Number**. Will 2 divide evenly into both 15 and 60? No, so try 3. Three will divide into both evenly so divide by 3 and you get 15 ÷ 3 = 5 and 60 ÷ 3 = 20.

3	15	60
	5	20

Step 4 - Now, what is the smallest **Prime Number** that will divide evenly into 5 and 20? Will 2? No. Will 3? No. Will 5? Yes! So divide both numbers by 5. You get $\frac{1}{4}$ Anytime you get a **one**, add a "**d**" to the front, and you are **done**!

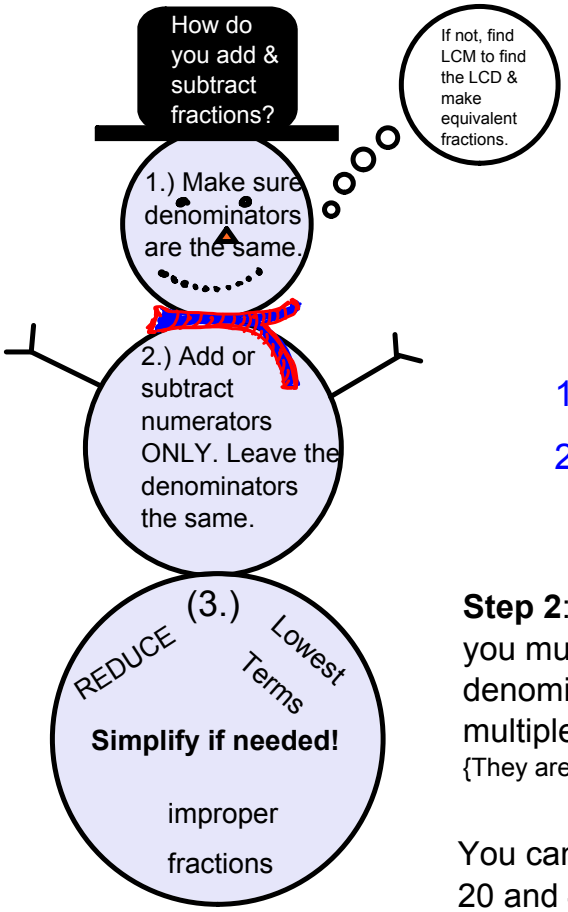
3	15	60
5	5	20
	1	4

Other Rules: After dividing, if you have 2 consecutive numbers (ie: 2/3, 5/6, 3/4 so on...) they are **neighbors** and this means you are **done**! $\frac{30}{36}$

2	30	36
3	15	18
	5	6

When there is not a number that will divide evenly into both numbers, then your fraction is in simplest form. $\frac{4}{10}$

2	4	10
	2	5



Step 1: If you have a fraction problem with **like** denominators you simply perform the operation with the numerators and keep the same denominator. **If the answer needs to be simplified, you do so using the slide method. $\frac{3}{10}+\frac{2}{10}=\frac{5}{10}=\frac{1}{10}$

1st 5 Primes:

2, 3, 5, 7, 11

$5 \mid 5 \mid 10$

$1 \mid 2$

lowest term down on bottom as low as you can go.

Step 2: If the denominators are different, you must find the least common denominator (LCD) or least common multiple (LCM) using the slide method.

{They are the same thing!} $\frac{17}{20}-\frac{1}{4}=$

You can find LCD in using the "slide method". 20 and 4 are your denominators. They are different so put them in the "slide".

This is your GCF! 4

$2 \mid 20 \mid 4$

$2 \mid 10 \mid 2$

$5 \times 1 = 20$ This is your LCD!

$\frac{17}{20}\times\frac{1}{1}=\frac{17}{20}$

$-\frac{1}{4}\times\frac{5}{5}=\frac{5}{20}$

$\frac{12}{20}=\frac{3}{5}$

$2 \mid 12 \mid 20$

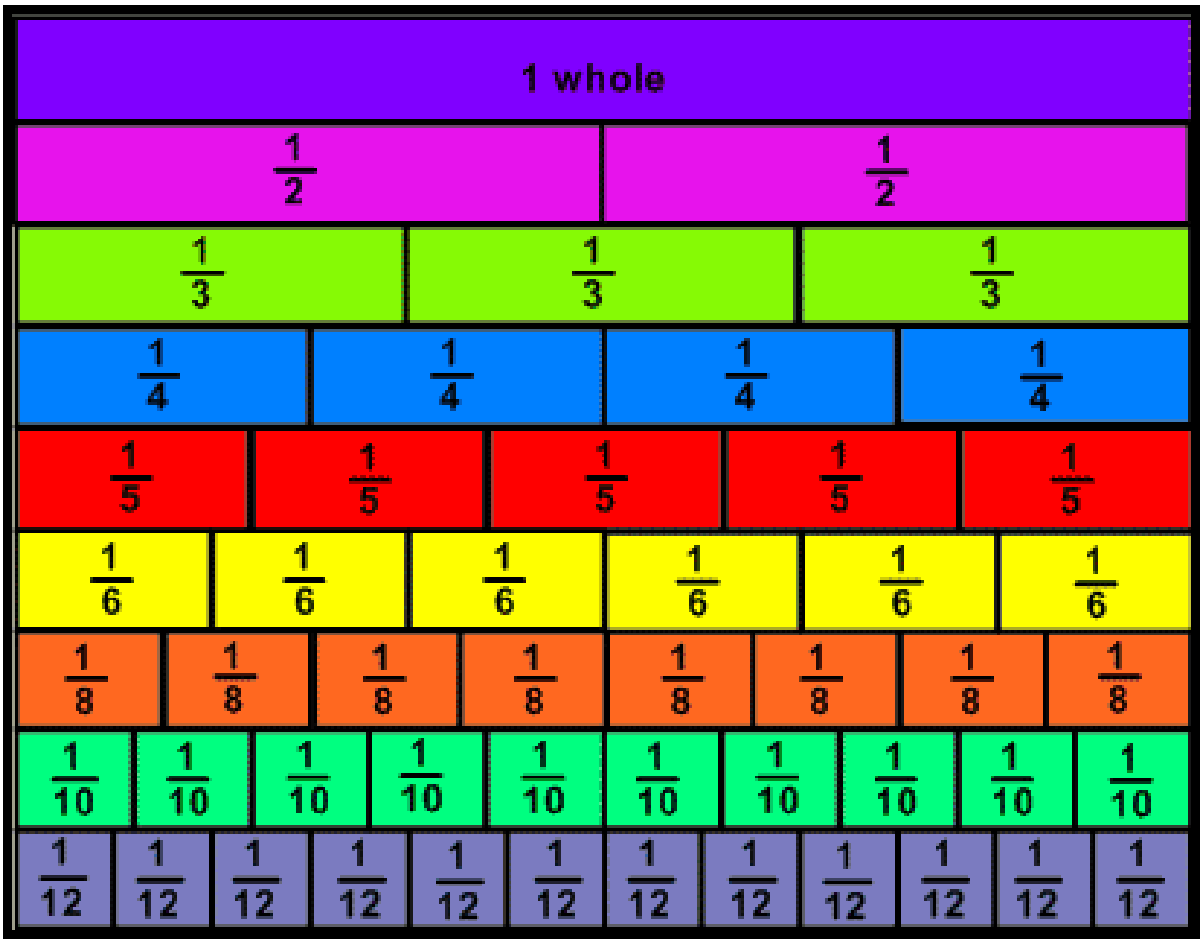
$2 \mid 6 \mid 10$

$3 \mid 5$

Step 3: After finding the LCD (LCM) change each fraction in the problem to have that denominator. Since 20 is our LCD, we would multiply the 20 in the problem by 1 to get 20. We would multiply the 4 by 5 to get 20. The RULE says that what we multiply by on the bottom, we must multiply by that same number on the top! We now have a fraction with a common denominator that we can solve. Our answer is not in lowest terms so we must simplify it. Once again we can simplify by using the "slide".

$\frac{7}{3}-\frac{2}{3}=\frac{5}{3}$ $3\overline{)5}$ $1\frac{2}{3}$, -3, 2

Special Occasions: If your answer is improper (numerator is bigger than denominator) you must turn it into a mixed number fraction by dividing the numerator (top number) by the denominator (bottom number).


1 whole
1/2 1/2
1/3 1/3 1/3
1/4 1/4 1/4 1/4
1/5 1/5 1/5 1/5 1/5
1/6 1/6 1/6 1/6 1/6 1/6
1/8 1/8 1/8 1/8 1/8 1/8 1/8 1/8
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1/12 1/12 1/12 1/12 1/12 1/12 1/12 1/12 1/12 1/12 1/12 1/12