

Adding Fractions

With Like Denominators

Let's say...

You have 1 doughnut!



You eat $\frac{1}{2}$ of it



Now you only have $\frac{1}{2}$ of a doughnut

Your cousin has $1 \frac{1}{2}$ doughnuts



And you give her your half.

How many doughnuts does your cousin have?

$$1 \frac{1}{2} + \frac{1}{2} = 2$$



what if both you and your cousin had $1 \frac{1}{2}$ doughnuts?



$$1\frac{1}{2} + 1\frac{1}{2} = 3$$



Adding Fractions with a LIKE Denominator

What's a like denominator?

Like denominators means the bottom numbers of the fractions you are adding are the same, like this:

$$1/4 + 3/4$$

And NOT like this:

$$2/3 + 3/5$$

The bottom numbers(Denominators), 3 & 5 are not the same.

Fractions that have LIKE denominators are added exactly the same as whole numbers.

Example:

$$1 + 1 = 2$$

$$\frac{1}{2} + \frac{1}{2} = \frac{2}{2}$$

Fractions that equal Whole Numbers

Whenever the numerator which is the top and the denominator which is the bottom are equal the fraction equals 1.

$$4/4 = 1$$

$$9/9 = 1$$

What are mixed numbers?

And how to add them

A mixed number includes a whole number and a fraction

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

$$3\frac{2}{3}$$

$$6\frac{4}{7}$$

How do you add a mixed number?

Let's say you're adding : $1\frac{1}{3} + 2\frac{2}{3}$

1. You add the fractions $\frac{1}{3} + \frac{2}{3} = \frac{3}{3} = 1$

2. Add the whole numbers $1+2 = 3$

3. Add the results from your first 2 steps $1+3 = 4$

$$1\frac{1}{3} + 2\frac{2}{3} = 4$$

There are two more points that you should know

You can switch the steps around and it still works

$$1\frac{1}{3} + 2\frac{2}{3}$$

1. you add the whole numbers $1 + 2 = 3$
2. Add the fractions next this time, $1/3 + 2/3 = 1$
3. Again you add your results from the first 2 steps, $3 + 1 = 4$.

$$1\frac{1}{3} + 2\frac{2}{3} = 4$$

Let's look at..

Mixed numbers in doughnuts



$1\frac{1}{3}$

You have $1\frac{1}{3}$ doughnuts

Your cousin also has $1 \frac{1}{3}$ doughnuts



$1 \frac{1}{3}$

Cousins doughnuts = $1 \frac{1}{3}$

$$1 \frac{1}{3} + 1 \frac{1}{3} = 2 \frac{2}{3}$$