Subtracting on Fractions

There are 3 simple steps to subtract fractions:

- Make sure the bottom numbers (the denominators) are the same
- Subtract the top numbers (the numerators). Put the answer over the same denominator.
- Simplify the fraction (if needed).

Example

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

The bottom numbers are already the same. Go straight to step 2.

Subtract the top numbers and put the answer over the same denominator:

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

Simplify the fraction:

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

Example

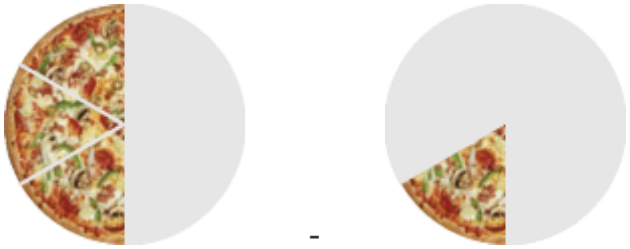
$$\frac{1}{2} - \frac{1}{6}$$

The bottom numbers are different. See how the slices are different sizes? We need to make them the same before we can continue, because we can't subtract them like this:

To make the bottom numbers the same, multiply the top and bottom of the first fraction ($^1/_2$) by 3 like this:

$$\frac{1}{2} = \frac{3}{6}$$

And now our question looks like this:



The bottom numbers (the denominators) are the same, so we can go to step 2.

Subtract the top numbers and put the answer over the same denominator:

$$\frac{3}{6} - \frac{1}{6} = \frac{3-1}{6} = \frac{2}{6}$$

In picture form it looks like this:

Simplify the fraction:

$$\frac{2}{6} = \frac{1}{3}$$