

Adding Fractions

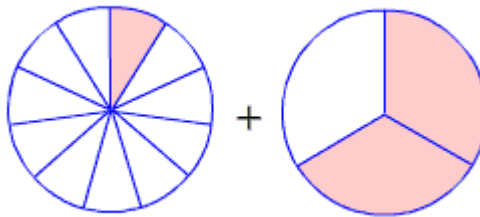
Fractions with Different Denominators

If the denominators are different, then you have to use equivalent fractions which have a common denominator (bottom). To do this, you need to find the least common multiple (LCM) of the two denominators.

To add fractions with unlike denominators, rename the fractions with a common denominator. Then add and simplify if possible.

For example, suppose you want to add:

$$\frac{1}{11} + \frac{2}{3}$$



The LCM of 3 and 11 is 33. So, we need to find fractions equivalent to $\frac{1}{11}$ and $\frac{2}{3}$ which have 33 in the denominator.

Multiply the numerator and denominator of $\frac{1}{11}$ by 3 and multiply the numerator and denominator of $\frac{2}{3}$ by 11.

This gives:

$$\frac{3}{33} + \frac{22}{33} = \frac{25}{33}$$

