

Adding Fractions

There are three steps to adding fractions:

1. Ensure that the bottom numbers (denominators) are the same. If they are not, change them so that they are the same (they have a common denominator).
2. Once the denominators are the same, add the top numbers (nominators) and place the result over the common denominator.
3. Simplify the fraction (if possible).

Example 1

To get started, view this [tutorial](#) and follow the example presented. **Example 2**

Now, let's work through the example below. The questions below will guide you through the process.

Add and simplify

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

Step 1. Are the denominators the same?

Yes

No

The correct answer is: No

The denominators are not the same.

Is one of the denominators multiple of the other?

Yes

No

The correct answer is: No

The denominators are not multiple of each other.

Select the common denominator

7

12

4

11

The correct answer is:12

12 is the common denominator and it is obtained by multiplying the two denominators.

Next we need to expand both fractions to have a denominator of 12. Expand both fractions by multiplying them and click done when you are ready. Enter your results in the appropriate boxes.

1

x

4

x

1

x

3

x

The expanded fractions are $\frac{3}{12}$ and $\frac{4}{12}$

Now add the expanded fractions

$$\frac{3}{12} + \frac{4}{12}$$

=

The correct answer is $\frac{7}{12}$

Can $\frac{7}{12}$ be simplified?

Yes

No

The correct answer is: No

$\frac{7}{12}$ cannot be simplified further.

Practice

Now, test your knowledge by completing these [exercises](#) .

Add and simplify $\frac{1}{2} + \frac{1}{4} = ?$

- $\frac{2}{4}$
- $\frac{5}{4}$
- $\frac{2}{8}$
- $\frac{3}{4}$

Select the correct answer.