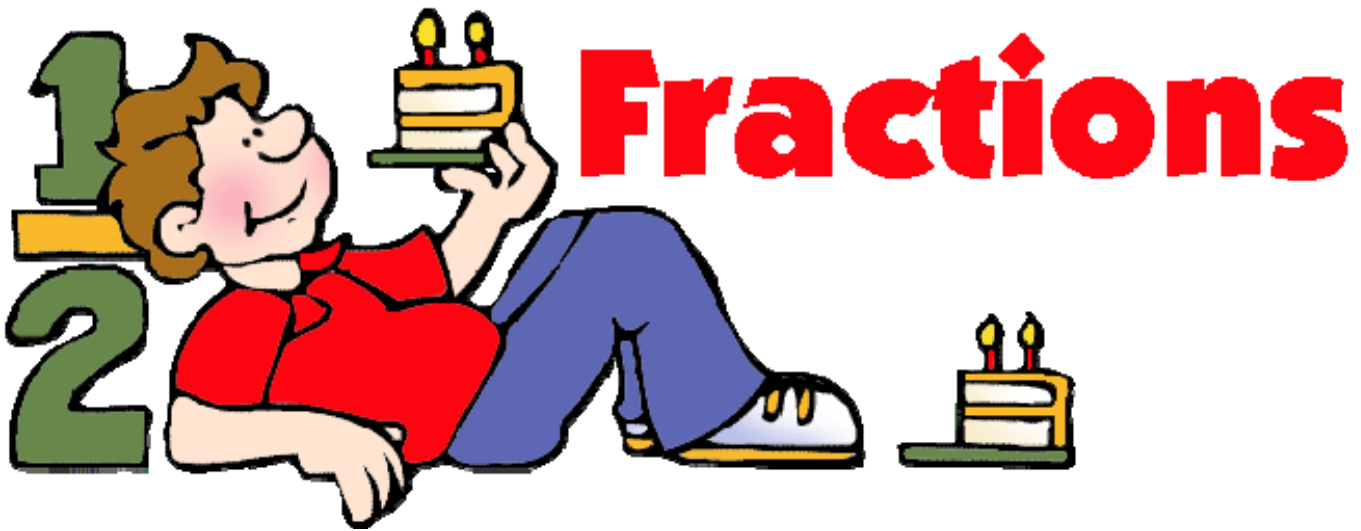


0.2

Adding and Subtracting Fractions



Like
Fractions

fractions that have
the same
denominator

Ex. $\frac{4}{5} + \frac{2}{5}$ OR $\frac{6}{7} - \frac{3}{7}$

To ADD or SUBTRACT:

Step 1

Add or subtract the numerators.

Step 2

LIKE denominators stay the same.

Step 3

Make sure your answer is in **simplest form**.

Example: $\frac{3}{6} + \frac{4}{6} = \frac{7}{6} \rightarrow 1 \frac{1}{6}$

$6 \overline{) 7}$

$\underline{-6}$

1

Example: $\frac{7}{9} - \frac{4}{9} = \frac{3}{9} \rightarrow \frac{1}{3}$

$\frac{3}{9} \div \frac{3}{3} = \frac{1}{3}$

When they are Unlike Fractions:

Step 1

Look at the denominators:

$$\begin{array}{r} \frac{3}{4} \\ - \frac{2}{3} \\ \hline \end{array}$$

OR

$$\begin{array}{r} \frac{3}{4} \\ + \frac{2}{3} \\ \hline \end{array}$$

Step 2

Find the least common denominator (L.C.D.) also known as the least common multiple (L.C.M.).

Multiples of 4: 4, 8, **12**, 16

Multiples of 3: 3, 6, 9, **12**, 15

12 would be your new denominator!

Step 3

Write **equivalent fractions** with this **NEW** denominator.

The new denominator is **12**.

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \qquad \frac{2}{3} \times \frac{4}{4} = \frac{8}{12}$$

Step 4

Add or Subtract the Fractions.

$$\frac{9}{12} - \frac{8}{12} = \frac{1}{12}$$

$$\frac{9}{12} + \frac{8}{12} = \frac{17}{12} \quad 1\frac{5}{12}$$

Step 5

Simplify if necessary!

Try these 2 examples in your math notes...

Ex. $\frac{5}{6} + \frac{6}{8}$ $\frac{4}{5} - \frac{2}{3}$