Types of Fractions

The Resource Center

Materials contained in this handout are excerpted from:

Fractions and Decimals

Available from:
The Resource Center
www.RCTresources.com

Types of Fractions

There are four basic types of fractions. These are simple, mixed, improper, and fractions that equal one. Up to now we have been dealing with simple fractions. These are fractions with a numerator smaller than the denominator, such as:

$$\frac{1}{2} \quad \frac{3}{4} \quad \frac{2}{5} \quad \frac{9}{11} \quad \frac{4}{5} \quad \frac{6}{39}$$

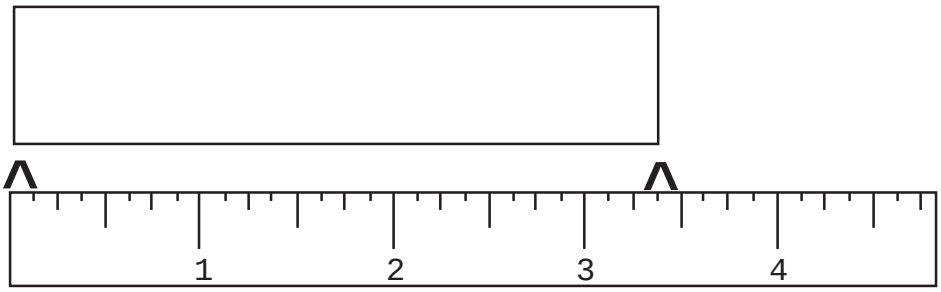
A mixed number is simply one of these fractions with a whole number in front of it, like this:

$$3\frac{1}{2} \quad 1\frac{3}{4} \quad 4\frac{2}{5} \quad 2\frac{9}{11} \quad 7\frac{4}{5}$$

You may use mixed numbers every day without knowing it.

> A recipe calls for 1-1/3 cups of water.
> Assembly instructions recommend turning the top bolt 2-1/2 turns clockwise.
> A pattern calls for 4-3/8 yards of fabric.
> Interest rates are figured at 18-1/4 percent.

Rulers are frequently read in mixed numbers. This box measures 3-3/8" long.



An <u>improper fraction</u> has a numerator that is larger than the denominator. Examples of these fractions are:

$$\frac{33}{10} \qquad \frac{2}{1} \qquad \frac{11}{1} \qquad \frac{8}{3}$$

Improper fractions are sometimes created when adding two or more simple fractions together, such as adding 6/10 + 7/10. Mixed numbers are also changed into improper fractions when a math function is being performed on them.

If a fraction has the same numerator and denominator, the fraction is equal to one. For example, if you have a dollar that has been divided into four quarters, and you have all four quarters, you have a whole dollar.

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