Subtracting Fractions

Process for Subtracting Fractions

1. Change subtraction to addition by the opposite of the second fraction.
2. Add the fractions as described in process for adding fractions.

This is the exact same method we used when we were adding integers.

Example:

$$\frac{-2}{7}-\frac{3}{5}=\frac{-2}{7}+\frac{-3}{5}$$

Here, the problem has been changed to an equivalent addition problem and so now we add fractions by the usual method.

$$\frac{-2}{7}-\frac{3}{5}=\frac{-2}{7}+\frac{-3}{5}$$

$$=\frac{-2}{7}\left(\frac{5}{5}\right)+\frac{-3}{5}\left(\frac{7}{7}\right)$$

$$=\frac{-10}{35}+\frac{-21}{35}$$

$$=\frac{-33}{35}$$

Example:

$$\frac{3}{10}-\frac{5}{6}=\frac{3}{10}+\frac{-5}{6}$$

$$=\frac{3}{10}\left(\frac{3}{3}\right)-\frac{5}{6}\left(\frac{5}{5}\right)$$

$$=\frac{9}{30}+\frac{-25}{30}$$

$$=\frac{-16}{30}$$

$$=\frac{-8}{15}$$