**8.5 Adding and Subtracting Rational Expressions**.  
Objective: To add and subtract rational expressions.

**Adding and Subtracting Rational Expressions with**

**Like Denominators**:

1. Add or Subtract the numerators
2. Place the result over the common denominator

*Examples: Perform the indicated operation*

*a) b)*

**Adding and Subtracting Rational Expression with**

**Unlike Denominators:**

1. Find the least common denominator (LCD)
2. Rewrite each expression as an equivalent rational expression using the LCD
3. Add or Subtract rational expressions as with like denominators

*Examples: Perform the indicated operation*

*note LCD: (x+2)(x+2)(x-2*

**Complex Fraction**: a fraction that contains a fraction in its numerator or denominator

**Simplifying a Complex Fraction**: Method 1

1. Write its numerator and denominator as single fractions
2. Divide by multiplying by the reciprocal of the denominator

**Simplifying a Complex Fraction**: Method 2

1. Multiply both the numerator and denominator by the LCD of all the rational expression and simplify.

***Homework: page 539 #1-5, 11-27 (odd), 31-33 (odd)***