Algebra 1.5 7.5 **Complex Rational Expressions**

* Simplify rational expressions.

***Complex rational expression:*** A rational expression that contains rational expressions in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Examples:

**To simplify a complex rational expression, use one of the following methods.**

**Method 1**

1. Simplify the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ if needed.

2. Rewrite as a horizontal division problem.

**Method 2**

1. Multiply the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the
 complex rational expression by their LCD.

2. Simplify.

**Example 1:**  Simplify. $\frac{\frac{3}{4}+\frac{5}{6}}{\frac{5}{8}-\frac{1}{6}}$

**Homework:** Pg 533 #8-48 by 4s