

Module 2 – Rational Expressions  
Lesson 4 – Complex Rational Expressions  
Homework 1

Name \_\_\_\_\_

Simplify each of the following complex expressions

1. 
$$\frac{\frac{\frac{x}{y}+3}{4+\frac{x}{y}}}$$

2. 
$$\frac{4-\frac{1}{x^2}}{2-\frac{1}{x}}$$

3. 
$$\frac{\frac{\frac{x}{x-y}}{x^2}}{x^2-y^2}$$

4. 
$$\frac{1-\frac{6}{a^2+2}}{\frac{4a+2}{a^2+2}+1}$$

5. 
$$\frac{\frac{\frac{a}{a-1}-\frac{2a}{a-2}}{\frac{2a}{a-2}-\frac{3a}{a-1}}}$$