

Business PreCalculus MATH 1643 Section 004, Spring 2014
Worksheet 4

1. Find the LCD of:

a. $\frac{x^2-7x}{x^2-6x-7}, \frac{2-x}{(x+1)^2}$

b. $\frac{x+1}{x^2-9}, \frac{x}{x^2+3x}$

2. Perform the indicated operations then simplify:

a. $\frac{3x+1}{(2x+1)^2} + \frac{x+3}{4x^2-1}$

b. $\frac{x-2}{x^2+3x-10} + \frac{x+3}{x^2+x-6}$

c. $\frac{x+3a}{x-5a} - \frac{x+5a}{x-3a}$

d. $\frac{x-3}{x^2-25} - \frac{x-3}{x^2+9x+20}$

e. $\frac{x^2+5x+6}{x^2+6x+9} \div \frac{x^2+3x+2}{x^2+7x+12}$

f. $\frac{3-x}{x+5} \cdot \frac{x^2+8x+15}{x^2-9}$

3. Simplify the following complex fractions:

a. $\frac{2-\frac{2}{x}}{1+\frac{2}{x}}$

b. $x - \frac{x}{x+\frac{1}{2}}$