Name: _____

Math 80 Worksheet #7
March 16, 2007

1. Section 6.1: Rational Expressions
   Write each rational expression in lowest terms.

   (a) $\frac{6x-18}{9x-27}$

   (b) $\frac{y^2-4}{y+2}$

   (c) $\frac{5-a}{a-5}$

   (d) $\frac{4m^2-4m}{2-2m}$

2. Section 6.2: Multiplying and Dividing Rational Expressions

   (a) $\frac{2(x+1)}{3x^2} \cdot \frac{6x}{2(x+1)}$

   (b) $\frac{4a+16}{10} \cdot \frac{18}{3(a+4)}$

   (c) $\frac{8p^2q}{3} \div \frac{4pq^2}{2}$

   (d) $\frac{m^2-16}{3m} \div \frac{2m+8}{m^2}$

3. Section 6.3: Least Common Denominator
   Find the LCD of each pair.

   (a) $\frac{5}{x^2}, \frac{2}{3x^5}$

   (b) $\frac{2}{5y}, \frac{-3}{5y+5}$

   (c) $\frac{2k}{k-9}, \frac{3}{9-k}$

   (d) $\frac{2m}{m^2-9}, \frac{4}{m-3}$

4. Section 6.4: Adding & Subtracting Rational Expressions

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

   (b) $\frac{5}{x^2} + \frac{2}{3x^5}$ (See 3(a))

   (c) $\frac{2}{5y} - \frac{3}{5y+5}$ (See 3(b))

   (d) $\frac{2k}{k-9} + \frac{3}{9-k}$ (See 3(c))

   (e) $\frac{2m}{m^2-9} - \frac{4}{m-3}$ (See 3(d))