## Name: \_

## Math 111 Intro to Math Methods and Applications - Crawford

Book and notes (in any form) are not allowed. You may use a calculator. Show all your work. Good Luck! [Form A] **1.** (3 pts) Factor by grouping.  $8ab^2 - 12ab - 6b + 9$ 

2. (5 pts) Factor Completely.

(a).  $x^2 + 5x - 24$ 

(b).  $8x^2 - 21x - 9$ 

**3.** (12 pts) Perform the indicated operation and simplify.

(a). 
$$\frac{4x-8}{3x-9} \cdot \frac{x-3}{3x-6}$$

(b). 
$$\frac{x^2 + 3x}{x+1} \div (x^5 - 9x^3)$$

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