## Add and Subtract Rational Expressions

Ex 1: Perform the indicated operation and simplify.

A. 
$$\frac{3x^2}{x-8} + \frac{6x}{x-8}$$

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

Ex 2: Perform the indicated operation and simplify.

A. 
$$\frac{x}{x^2-4x+3} + \frac{5}{x-3}$$

B 
$$\frac{2}{x^2-25} - \frac{3x}{x-5}$$

C. 
$$\frac{12}{5x} + \frac{7}{6x}$$

E. 
$$2 + \frac{2}{x^2 - 2}$$

D. 
$$\frac{x-2}{x^2+x-12} + \frac{x}{x^2-2x-3}$$

F. 
$$\frac{x}{x+3} - \frac{3}{x+2} - \frac{1}{x^2+5x+6}$$

Ex 3: Simplify the Complex Fractions.

A. 
$$\frac{\frac{2}{x} + \frac{3}{x-1}}{\frac{1}{2x-2}}$$

B. 
$$\frac{\frac{3}{x+2} + \frac{2}{3}}{\frac{2x}{x+2} - \frac{1}{x}}$$

C. 
$$\frac{\frac{3x}{2x-1}-2}{\frac{5}{4x}-\frac{x}{2x-1}}$$