

M117 SECTION 7.3 ADD & SUBTRACT RATIONAL EXPRESSIONS--SAME DENOMINATOR

To Add or Subtract Rational Expressions:

1. Make sure there is a **COMMON DENOMINATOR**.
2. Write as a **SINGLE FRACTION** - use () with subtraction!!!!
(This may seem too simple of a step right now, but it will be very necessary as the problems become more complicated.)
3. Simplify the **NUMERATOR**.
4. Try to **REDUCE**.

CSNR → "Calculus Students Never Relax"

$$\frac{2}{8x^2} + \frac{4}{8x^2}$$

$$\frac{4a + 3b}{2} - \frac{4a - 3b}{2}$$

$$\frac{m^2 - 8m}{m - 6} + \frac{12}{m - 6}$$

$$\frac{3x + 12}{x^2 + 2x - 8} - \frac{x + 4}{x^2 + 2x - 8}$$

Write the rational expression as an equivalent rational expression with the given denominator.

$$\frac{4b}{9a} = \frac{\quad}{27a^2b}$$

YOU TRY:

$$\frac{x}{x+5} - \frac{x-9}{x+5} + \frac{x-4}{x+5}$$

$$\frac{3x^2 + 2x}{x-1} - \frac{10x-5}{x-1}$$