

11.5 Adding +

May 14, 2007

Subtracting Rat. Exp. $\frac{3}{7} + \frac{2}{7} = \frac{5}{7}$

Adding: $\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$

Yes... We can add these, since they have a common Denom.

Subtraction: $\frac{a}{c} - \frac{b}{c} = \frac{a-b}{c}$

ex1

$$\frac{5}{2x} + \frac{(x-5)}{2x} = \frac{5+x-5}{2x} = \frac{x}{2x} = \frac{1}{2}$$

free stuff

Self... Do they
have a Common
Denom.? Yes!

ex2)

$$\frac{4}{x+2} - \frac{x+4}{x+2} = \frac{4-x-4}{(x+2)} = \underline{\underline{\frac{-x}{(x+2)}}}$$

ex 3)

$$\frac{3x-4}{x-4} - \frac{2x}{x-4} = \frac{(3x-4) - 2x}{(x-4) \cdot 1} = \frac{1}{1}$$

ex 4)

$$\frac{4x}{3x^2 - x - 2} \quad \ominus \quad \frac{x-2}{3x^2 - x - 2}$$

$$\begin{aligned} & \frac{\cancel{(3x+2)}}{\cancel{4x} \cancel{-x} + 2} \\ & \frac{4x - \cancel{(x-2)}}{\cancel{3x^2} \ominus \cancel{x} - 2 \quad \cdot 2} \\ & \frac{1}{(1x-1)(3x+2)} \end{aligned} \quad = \quad \frac{1}{\underline{\underline{(x-1)}}}$$

Pg 660 : 18-3ka)