MULTIPLYING / DEVIDING RATIONAL EXPRESSIONS

Note Title 4/13/2012

- WE CAN EVALUATE $\frac{3}{4} \times \frac{8}{9} = \frac{24}{36} = \frac{2}{3}$

OR

$\frac{\cancel{3}^{1}}{\cancel{4}_{1}} \times \frac{\cancel{8}^{2}}{\cancel{9}_{3}} = \frac{2}{3}$

IE $\frac{12x}{5y} \div \frac{6x}{10y} \Rightarrow \frac{\cancel{2}\cancel{12x}}{\cancel{5y}_{1}} \times \frac{\cancel{2}\cancel{10y}}{\cancel{6x}_{1}} = \frac{4}{1} = 4$

IE $\frac{4x-8}{3x-6} \times \frac{6x}{4y} = \frac{\cancel{4}(x-2)}{\cancel{3}(x-2)_{1}} \times \frac{\cancel{2}\cancel{6}x}{\cancel{4y}} = \frac{2x}{y}$

Ex

$$\frac{\dfrac{x^2+3x+2}{x^2+2x+1}}{\dfrac{x^2-1}{x-1}} \Longrightarrow \frac{\dfrac{(x+1)(x+2)}{(x+1)(x+1)}}{\dfrac{(x+1)(x-1)}{x-1}}$$

$$\frac{\dfrac{x+2}{x+1}}{x+1} \Longrightarrow \frac{x+2}{x+1} \div x+1$$

$$\frac{x+2}{x+1} \times \frac{1}{x+1} = \frac{x+2}{(x+1)(x+1)} \text{ or } \frac{x+2}{(x+1)^2}$$

H/W Pg 395 # 1, 2, 4, 6 1ST + LAST