**ML #3: Dividing Expressions Involving Exponents (Exponent Unit - Math 7 Plus)**

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| **Dividing Expressions*** How can we rewrite the following expression?

 $\frac{7^{8}}{7^{3}}$ $\frac{x^{6}}{x^{2}}$ $\frac{g^{2}}{g^{5}}$**RULE FOR DIVIDING EXPRESSIONS WITH THE SAME BASE****TRY THESE: Simplify- No negative exponents unless the directions ask for negative exponents.**1) $\frac{10^{7}}{10^{3}}$ 2) $\frac{12m^{5}}{3m}$ 3) $\frac{5^{4}x^{6}}{5x^{6}}$ 4) $\frac{w^{5}x^{-4}}{w^{-2}y^{-10}z^{3}}$ 5) $(2x^{2}y^{-3})^{3}$ $(4x^{2}y^{-3})^{-2}$6) Write without a fraction bar (use negative exponents)  $\frac{x^{2}y^{3}}{x^{3}y}$  |

Practice for Exponent Unit ML #3: Dividing Exponents (Math 7+)

**TRY THESE: Simplify- No negative exponents unless the directions ask for negative exponents.**

1) $\frac{x^{20}}{x^{18}}$ 2) $\frac{6b^{3}}{18}$ 3) $\frac{x^{5}y^{6}}{x^{8}y^{3}}$

4) $\frac{16x^{-4}y^{15}}{12x^{8}y^{-7}z^{3}}$ 5) $\frac{a^{4}(2ab)^{3}}{2a(b^{3})}$ 6) $\frac{(x^{3}y^{4 })^{2}}{(x^{2}y^{3})^{2}}$

7) $(4x^{3}y^{-2})^{3}$ $(2x^{2}y^{-3})^{-3}$

8) Write without a fraction bar (use negative exponents) $\frac{m^{3}n^{2}}{m^{6}n^{8}}$