Exponent Rules	The Rule	Why it works	Example
	When MULTIPLYING with LIKE BASES, you keep the base and add the exponents	$x^4 \cdot x^2 = x \cdot x \cdot x \cdot x \cdot x \cdot x = x^6$ $\underbrace{\quad}_{x^4} \quad \underbrace{\quad}_{x^2}$	$x^{4+2} = x^6$
	When DIVIDING with LIKE BASES, you keep the base and SUBTRACT the exponents	$\dfrac{a^6}{a^3} = \dfrac{a \cdot a \cdot a \cdot a \cdot a \cdot a}{a \cdot a \cdot a} = \dfrac{a \cdot a \cdot a}{1} = a^3$	$a^{6-3} = a^3$
	When RAISING A POWER TO A POWER, you MULTIPLY the exponents	$(b^2)^3 = (b \cdot b) \cdot (b \cdot b) \cdot (b \cdot b) = b^6$	$b^{2 \cdot 3} = b^6$
	When you have a NEGATIVE exponent, you make it a fraction, flip it, and make the exponent POSITIVE.	$c^{-4} = \dfrac{1}{c^4}$	$\dfrac{a^{-2}}{b^3} = \dfrac{1}{a^2 b^3}$
	When you have ZERO as an exponent, the answer is 1! ALWAYS	$a^0 = 1$	$7{,}201^0 = 1$