*(circled handwritten note)* key

| Property | Definition | Example |
|---|---|---|
| Product of Powers | $a^m * a^n = a^{m+n}$ | $x^7 * x^3 = x^{10}$ |
| Power of a Power | $(a^m)^n = a^{m*n}$ | $(x^7)^3 = x^{21}$ |
| Power of a Product | $(ab)^m = a^m b^m$ | $(xy)^7 = x^7 y^7$ |
| Quotient of Powers | $\dfrac{a^m}{a^n} = a^{m-n}$ | $\dfrac{x^7}{x^3} = x^4$ |
| Power of a Quotient | $\left(\dfrac{a}{b}\right)^m = \dfrac{a^m}{b^m}$ | $\left(\dfrac{x}{y}\right) = \dfrac{x^7}{y^7}$ |
| Zero Exponent | $a^0 = 1$ | $x^0 = 1$ |
| Negative Exponent | | |
| Rational Exponent | | |