**Exponent Rules**

|  |  |
| --- | --- |
| **Multiplying Powers / Same Base*** Keep the base, add the exponents

Ex. Ex.  | **Power of a Power*** Keep the base, multiply the exponents.

Ex. Ex.  |
| **Power of a Product*** Share the exponent to each factor in the product.

Ex. Ex.  | **Quotient of Power / Same Base*** Keep the base, subtract the exponents

Ex. Ex.  |
| **Power of a Quotient*** Share the exponent to the numerator and the denominator.

Ex. Ex.  | **Zero Exponent*** The zero power of any number except 0 is 1.

Ex. 80 = 1 Ex. 6m0 = 6•1 =6Ex. (4d2)0 = 1 |
| **Negative Exponent*** A base with a negative exponent equals the reciprocal of the base with a positive exponent.

Ex. Ex. 5n-6 =   |