**Lesson 2.1 Integer Exponents**

**Vocab:**

Base – the number which is affected by the number

Exponent – the number that states how many time the base is multiplied.

Ex: 1a. = 3\*3 = 9 1b. = 4\*4\*4 = 64

3 – Base 4 – Base

2 – Exponent 3 – Exponent

**Properties of Integer Exponents:**

*Zero Exponent Rule -* = 1

* Any power to 0 is always 1, no matter how small or big the base.

*Negative Exponent Rule* - =

* Put 1 over the integer exponent.

*Product Exponent Rule* - \* = =

* If bases are equal and numbers are multiplied, add exponents

*Quotient Exponent Rule* - = =

* If bases are equal and numbers are divided, subtract exponents

*Exponent Power Rule* – = =

* If a base is being raised to a power which is being raised to another power, multiply exponents.