Applying the Properties of Exponents

In exponential expression such as, the number 4 is called the **base**. The number 7 is called the **exponent**. It tells how many times the base is used as a factor.

So,

If the exponent is negative, put the exponential expression in the denominator of a fraction with a numerator of 1. So

To multiply exponential expressions with the same base, add the exponents.

Why this works:

To find the value of an exponential expression with an exponent, multiply the exponents.

Why this works

To divide exponential expressions with the same bases, subtract the exponents.

Why this works:

When a product has an exponent, the exponent applies to each factor.

Why this works: