Evaluating Negative Exponents Lesson

8^4 ←—— Positive Exponent

Positive exponents tell us how many times we **multiply** a number.

Example: 8^4 = 8 x 8 x 8 x 8 = 4,096

8^{-4} ←—— Negative Exponent

A negative is the opposite of a positive. The same is true of exponents.

Negative exponents tell us how many times we **divide** a number.

Example: 8^{-4} = 1 ÷ 8 ÷ 8 ÷ 8 ÷ 8

You could also simplify negative exponents by making it equal to 1 over the positive exponent of itself.

Example: 8^{-4} = 1 ÷ (8 x 8 x 8 x 8) or $\frac{1}{8^4}$

                            = 1/4,096 = 0.0002