02 Topic: Exponents

Content Area: **Mathematics**
Course(s): **Algebra 2**
Time Period: **Semester 1**
Length: **2-3 weeks**
Status: **Published**

Standards

MA.N-RN.A.1	Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.
MA.A-SSE.A.1	Interpret expressions that represent a quantity in terms of its context.
MA.N-RN.A.2	Rewrite expressions involving radicals and rational exponents using the properties of exponents.
MA.A-SSE.B.3	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.
MA.K-12.7	Look for and make use of structure.

Enduring Understandings

1. Mathematics is a language consisting of symbols and rules.
2. The same mathematical ideas can be represented concretely or symbolically.
3. There can be different strategies to solve a problem, but some are more effective and efficient than others.

Essential Questions

How will students apply the Laws of Exponents to simplify algebraic expressions?

How will students interpret mathematical vocabulary and methods and use it appropriately?

How will students add, subtract, and multiply polynomials?

Knowledge and Skills

Use Laws of positive and negative exponents.

Understand Terminology

Use Exponent Rules

Understand Polynomials

Evaluate Polynomials

Solve Mixture Application Problems

Solve Distance, Rate, Time Application Problems

Transfer Goals

Using mathematical reasoning and strategic thinking can allow for practical solutions ot many problems.

Often unique vocabulary and implementation methods are needed to solve problems.