

Mathematics
Algebra 1: Part 2
Unit 3: Laws of Exponents

Essential Understandings	<ul style="list-style-type: none"> ▪ The laws of exponents are very important to future mathematical work.
Essential Questions	<ul style="list-style-type: none"> ▪ What are the multiplication laws of exponents? ▪ How do I evaluate powers with negative exponents? ▪ How do I evaluate powers with zero as their exponent? ▪ What are the division laws of exponents?
Essential Knowledge	<ul style="list-style-type: none"> ▪ There are many multiplication laws of exponents. ▪ There are rules for negative exponents. ▪ There are rules for zero as an exponent. ▪ There are many division laws of exponents.
Vocabulary	<ul style="list-style-type: none"> ▪ <u>Terms:</u> <ul style="list-style-type: none"> ○ power, base, exponent, product of powers property, power of a power property, power of a product property, zero exponents, negative exponents, quotient of a powers property, power of a quotient property
Essential Skills	<ul style="list-style-type: none"> ▪ Use the multiplication laws of exponents. ▪ Evaluate powers with negative exponents. ▪ Evaluate powers with zero as their exponent. ▪ Use the division laws of exponents.
Related Maine Learning Results	<p><u>Mathematics</u></p> <p>A. Number Real Number A1.Students will know how to represent and use real numbers. c. Compute using laws of exponents.</p> <p>D. Algebra Symbols and Expressions D1.Students understand and use polynomials and expressions with rational exponents. a. Simplify expressions including those with rational numbers.</p>
Sample Lessons And Activities	<ul style="list-style-type: none"> ▪ Students will orally respond to questions. ▪ Students will utilize worksheets and their notes to demonstrate individual understanding of the concepts.
Sample Classroom Assessment Methods	<ul style="list-style-type: none"> ▪ Quizzes ▪ Take-home worksheets ▪ Tests
Sample Resources	<ul style="list-style-type: none"> ▪ <u>Publications:</u> <ul style="list-style-type: none"> ○ <u>Algebra 1 Concepts and Skills</u> - McDougal - Littell