

Mathematics
Algebra 1: CP
Unit 8: 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 of 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> D. Algebra Symbols and Expressions D1. Students understand and use polynomials and expressions with rational exponents.</p> <ol style="list-style-type: none"> a. Simplify expressions including those with rational numbers. b. Add, subtract, and multiply polynomials. c. Factor the common term out of polynomial expressions. d. Divide polynomials by $(ax+b)$.
Sample Lessons And Activities	<ul style="list-style-type: none"> ▪ Students will orally respond to questions. ▪ Students will utilize worksheets and in their notes to demonstrate individual understanding of the concepts.
Sample Classroom Assessment Methods	<ul style="list-style-type: none"> ▪ Evaluate homework ▪ Quizzes ▪ Chapter test
Sample Resources	<ul style="list-style-type: none"> ▪ <u>Publications:</u> <ul style="list-style-type: none"> ○ <u>Algebra 1</u> - McDougall Littell