

Jumpstart

Evaluating Expressions

Order of operations: **P,E,M/D,A/S**

When you change a variable to a negative number, **enclose the negative number in parentheses**.

Working with exponents: Exponent rules for number with the same base

Product rule When multiplying, add the exponents. $x^a \cdot x^b = x^{a+b}$

Quotient rule When dividing, subtract the exponents. $\frac{x^a}{x^b} = x^{a-b}$

Power rule When raising to a power, multiply the exponents. $(x^a)^b = x^{ab}$

Negative exponents $x^{-a} = \frac{1}{x^a}$ $\frac{1}{x^{-a}} = x^a$

Zero exponent $x^0 = 1$ if $x \neq 0$

Other When adding or subtracting, don't change the bases or the exponents!