

Applet Overview: Algebraic Expressions

Essential Math Concept

- Understanding and evaluating variables in algebraic expressions.

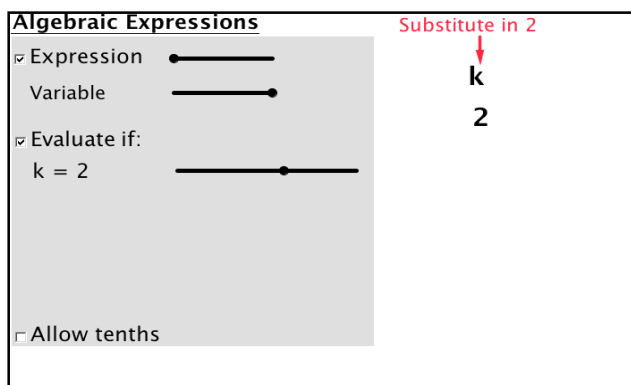
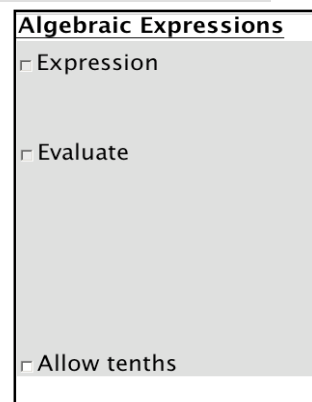
Essential Questions To Consider

- Do students understand that variables can be used for a unique unknown value [like $2 + \square = 12$ or $2 + x = 12$] or as a quantity that can vary [such as $y=2x+7$]?
- Do students understand that variables can be represented with many different letters yet can have the same value?
- Do students understand that variables can function as a container for many different values?
- Do students understand that there are a number of different notations for the same operation?

Student Engagement

Step 1: The *Algebraic Expressions* applet provides examples of expressions with various variable names. The tool is also designed to evaluate the given expression with a number of different quantities. Expressions can also be shown in a variety of notations.

- Check the *Expression* checkbox to see the expression.
- Move the slider next to the *Expression* checkbox to see various expressions.
- Move the *Variable* slider to change the variable name.



Step 2: Check the *Evaluate if* checkbox then move the slider to change the value of the variable. The values will be substituted then evaluated with the value selected on the slider.

