



# Vocabulary & Notation

There is no more important factor that affects student achievement than vocabulary and notation. Teach it explicitly!

## Mathematical Synonyms

Solve the equation

Find the roots

Find the zeros

Find the solution set

Find the values of the variable that makes the open sentence true

## Double meanings

<b>Operation;</b>	surgery or add, sub, mult or divide
<b>Mean;</b>	not nice or measure of central tendency
<b>Median;</b>	island in road or measure of central tendency
<b>Total;</b>	breakfast cereal or answer to add problem
<b>Product;</b>	something for sale or answer in mult problem
<b>Volume;</b>	turn up the sound or measure of capacity
<b>Root;</b>	part of a plant or an answer in alg

## Notation

*Multiplicative Inverse:*  $\forall x \in R, \exists !x / x \cdot \frac{1}{x} = 1$

For all x's that belong to the Real Numbers, there exists a unique x such that  $x \cdot 1/x = 1$

*Multiplication Property – Exponents:*  $a^m a^n = a^{m+n}$

When you multiply exponentials with the same base, you add the exponents.