

Rational Expressions vs. Rational Equations

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<i>Expressions</i>	<i>Equations</i>
Principle: Preserve <u>Value</u>	Principle: Preserve <u>Equality</u>
Example: "Simplify" $\frac{x}{x+1} + \frac{1}{x-1} = ?$	Example: "Solve for x " $\frac{x}{x+1} + \frac{1}{x-1} = x$
Procedure: add over common denominator <u>AND</u> <u>KEEP the</u> <u>denominator</u> <u>in the answer</u>	Procedure: multiply both sides by common multiple <u>AND</u> <u>DESTROY the</u> <u>denominators</u>