

Solving Exponential and Logarithmic Equations – Class Notes

- **Equations with variables in the exponent on BOTH sides.**
 - Get both sides of the equation to have the same base.
 - Use the 1-to-1 property of exponents... AKA the DUHH Property.
 - Solve the equation that was created by the exponents.

- **Equations with a variable in the exponent on ONE side.**
 - Isolate the exponent and its base.
 - Rewrite the equation in logarithmic form.
 - Continue solving as necessary.

- **Equations with Logs on BOTH sides.**
 - Condense to get a single log on both sides if necessary.
 - Use the 1-to-1 property of logs – DUHHH
 - Solve the resulting equation.

- **Equations with Logs on ONE side.**
 - Get a single log, isolated on one side. (Condense if necessary, and solve for the log.)
 - Rewrite the equation in exponential form, then solve the resulting equation.