

Solving Exponential Equations with Logarithms

Question: How can I solve an exponential equation using logarithms?

Answer: With equations, we are allowed to do any operation as long as we do it to both sides of the equation. That means we can take the logarithm of both sides of the equation.

Question: What good would it do me to take the logarithm of both sides of the equation?

Answer: The definition of an exponential equation is an equation with the variable in the exponent. When we take the logarithm of both sides, we can then rewrite the equation using the Power Property.

Question: What do I do after I take the logarithm of both sides and apply the Power Property?

Answer: Now, you just have to finish solving the equation and get the variable by itself.

Question: How should I write my answer?

Answer: On your quiz, you should always provide the exact answer (involving logarithms) and the approximate answer (found using your calculator).

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