

Properties of Logarithms

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▶ We found Properties about Exponents



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Logarithms, inverses of Exponential Functions, have similar properties

$$x = \log_b(b^x) \quad \text{and} \quad b^{\log_b(x)} = x$$



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$$\log_b(x \cdot y) = \log_b(x) + \log_b(y)$$

▶ Proof

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The third property will be most useful to us to try to solve the equations involving exponents that we could not solve!