

Properties of Logarithms base b

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Product to Sum:  $\log_b (AB) = \log_b A + \log_b B$

Quotient to Difference:  $\log_b \left( \frac{A}{B} \right) = \log_b A - \log_b B$

Exponent:  $\log_b x^n = n \cdot \log_b x$

Identity:  $\log_b b = 1$