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Mathematics II

Transcendental Function

Examples

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• *Find the following*

• $\log_4 16$

• $\log_{0.5} 4$

• Find x if $6^{\log_6 10} + 2^{\log_2 8} = 8^{\log_8 x}$

• Find dy/dx for:

• $y = \log_4 x^2$

• $y = \ln 10^x$

• Evaluate

• $\int \frac{dx}{x(\log_8 x)^2}$

• $\int 5^{2t-2} dt$

- Find x value for

- $x^x = 2^x$

- $3^x = 2^{x+1}$

- Find y' for

- $y = \frac{1}{\log_2 x}$

- $y = e^{\log_{10} x}$

- Evaluate:

- $\int \frac{\sec^3 x + e^{\sin x}}{\sec x} dx$