

# Evaluating Logarithmic Expressions

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Evaluate each expression.

1)  $2 \log_3 9 + \log_2 8$

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2)  $\log_2 32 \cdot 5 \log_7 49$

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3)  $\left(\frac{1}{2}\right) \log_4 256 - 4 \log_3 81$

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4)  $7 \log_8 2 + \log_4 16$

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5)  $\frac{6 \log_9 3}{\log_3 27}$

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6)  $\log_2 128 - 8 \log_6 36$

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7)  $\left(\frac{1}{2}\right) \log_5 25 \cdot 8 \log_3 9$

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8)  $\log_7 49 + 6 \log_5 125$

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9)  $\frac{\log_9 27}{3 \log_2 8}$

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10)  $\log_4 \left(\frac{1}{16}\right) \cdot \log_3 243$

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