

To evaluate a logarithmic expression...

Step 1: Create a logarithmic equation

Step 2: Convert equation from logarithmic form to exponential form

Logarithmic Form

Exponential Form

$$\log_b x = y \longrightarrow x = b^y$$

Evaluate the following logarithmic expressions.

$$\log_2 8$$

$$\log_3 81$$

$$\log_7 1$$

$$\log_4 16$$

Evaluate the following logarithmic expressions.

$$\log_{\frac{1}{2}} 4$$

$$\log_{\frac{1}{3}} 3$$

$$\log_2 \frac{1}{8}$$

$$\log_4 \frac{1}{16}$$

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