

Evaluating Expressions

L1ES3

Example :

Evaluate the expression : $\log_2 128$

$$\begin{aligned}\log_2 128 &= \log_2 2^7 \\ &= 7 \log_2 2 \\ &= 7 (1) \\ &= \mathbf{7}\end{aligned}$$

$$\log_a b^c = c \log_a b$$

$$\log_a a = 1$$

Evaluate each expression.

1) $\log_2 512$

Answer

2) $\log_5 \left(\frac{1}{125}\right)$

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3) $\log_5 \left(\frac{1}{5}\right)$

Answer

5) $\log_3 81$

Answer

7) $-6 \log_8 2$

Answer

10) $\log_7 343$

Answer

9) $8 \log_2 2$

Answer

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