Logarithm - Solve

Solve for x.

Example 1:
$$\log_4 \left(\frac{1}{256}\right) = x$$
$$4^x = \frac{1}{256}$$
$$4^x = 4^{-4}$$
$$x = \mathbf{-4}$$

Example 2:
$$\log_8 x = 2$$
$$2^8 = x$$
$$x = \mathbf{64}$$

Solve for x.

1) $\log_2 \left(\frac{1}{64}\right) = x$

x =

2) $\log_4 x = 3$

3) $\log_x 4 = \frac{1}{2}$

x =

5) $\log_x 8 = 3$

x =

7) $\log_3 x = 4$

x =

x =

9) $\log_{81} x = \frac{1}{4}$

x =

10) $\log_3 \left(\frac{1}{27}\right) = x$

x =

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Answer key

Logarithm - Solve

L1ES4

Solve for x.

Example 1:

$$\log_4 \left(\frac{1}{256}\right) = x$$
$$4^x = \frac{1}{256}$$
$$4^x = 4^{-4}$$
$$x = \textbf{-4}$$

Example 2:

$$\log_8 x = 2$$
$$2^8 = x$$
$$x = \textbf{64}$$

Solve for x.

1) $\log_2 \left(\frac{1}{64}\right) = x$

x = (**-6**)

2) $\log_4 x = 3$

3) $\log_x 4 = \frac{1}{2}$

x = (**16**)

5) $\log_x 8 = 3$

x = (**2**)

7) $\log_3 x = 4$

x = (**81**)

x = (**8**)

9) $\log_{81} x = \frac{1}{4}$

x = (**3**)

10) $\log_3 \left(\frac{1}{27}\right) = x$

x = (**-3**)

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