Algebra log

$\log_3 3 = 1 \quad \Rightarrow 3^1 = 3$

$\log_5 5 = 1 \quad \Rightarrow 5^1 = 5$

$\log_{\frac{1}{2}} \frac{1}{2} = 1 \quad \Rightarrow (\frac{1}{2})^1 = \frac{1}{2}$

The definition of log is:

$\log_2 4 = 2 \quad \Rightarrow 2^2 = 4$

$\log_2 8 = 3 \quad \Rightarrow 2^3 = 8$

$\log_2 16 = 4 \quad \Rightarrow 2^4 = 16$

$\log_2 32 = 5 \quad \Rightarrow 2^5 = 32$

$\log_2 1 = 0 \quad \Rightarrow 2^0 = 1$

$\log_2 2 = 1 \quad \Rightarrow 2^1 = 2$

$\log_2 1/2 = -1 \quad \Rightarrow 2^{-1} = \frac{1}{2}$

$\log_2 1/4 = -2 \quad \Rightarrow 2^{-2} = \frac{1}{4}$

$\log_2 1/8 = -3 \quad \Rightarrow 2^{-3} = \frac{1}{8}$

$\log_2 x = 1 \quad \Rightarrow x = 2^1 = 2$

$\log_2 x = 3 \quad \Rightarrow x = 2^3 = 8$

$\log_2 x = \frac{1}{2} \quad \Rightarrow x = 2^{1/2} = \sqrt{2}$

$\log_2 x = -4 \quad \Rightarrow x = 2^{-4} = \frac{1}{16}$

$\log_2 x = 0 \quad \Rightarrow x = 2^0 = 1$