



Logarithms - Convert Logarithm to Exponent - Fraction Value

1 Convert the given logarithm to the equivalent in exponent form

$$\log_5 \frac{1}{25} = -2$$

A	B	C	D
$\frac{1}{25} = -2$	$-2^5 = \frac{1}{25}$	$\frac{1}{25} = 5^{-2}$	$5^{-2} = \frac{1}{25}$

2 Convert the given logarithm to the equivalent in exponent form

$$\log_2 \frac{1}{4} = -2$$

A	B	C
$2^{-2} = \frac{1}{4}$	$-2^{\frac{1}{4}} = 2$	$\frac{1^2}{4} = -2$
D		
$-2^2 = \frac{1}{4}$		

3 Convert the given logarithm to the equivalent in exponent form

$$\log_{10} \frac{1}{100,000} = -5$$

A	B
$10^{-5} = \frac{1}{100,000}$	$\frac{1}{100,000} = 10^{-5}$
C	D
$-5^{10} = \frac{1}{100,000}$	$-5^{\frac{1}{100,000}} = 10$

4 Convert the given logarithm to the equivalent in exponent form

$$\log_4 \frac{1}{16} = -2$$

A	B	C	D
$4^{-2} = \frac{1}{16}$	$-2^{\frac{1}{16}} = 4$	$-2^4 = \frac{1}{16}$	$\frac{1^4}{16} = -2$

5 Convert the given logarithm to the equivalent in exponent form

$$\log_8 \frac{1}{64} = -2$$

A	B	C	D
$\frac{1}{64} = -2$	$-2^{\frac{1}{64}} = 8$	$8^{-2} = \frac{1}{64}$	$-2^8 = \frac{1}{64}$

6 Convert the given logarithm to the equivalent in exponent form

$$\log_{10} \frac{1}{100} = -2$$

A	B
$\frac{1}{100} = -2$	$10^{-2} = \frac{1}{100}$
C	D
$\frac{1}{100} = 10^{-2}$	$-2^{\frac{1}{100}} = 10$

7 Convert the given logarithm to the equivalent in exponent form

$$\log_3 \frac{1}{27} = -3$$

A	B	C	D
$\frac{1}{27} = -3$	$-3^{\frac{1}{27}} = 3$	$3^{-3} = \frac{1}{27}$	$-3^3 = \frac{1}{27}$

8 Convert the given logarithm to the equivalent in exponent form

$$\log_{10} \frac{1}{10,000} = -4$$

A	B
$-4^{10} = \frac{1}{10,000}$	$-4^{\frac{1}{10,000}} = 10$
C	D
$10^{-4} = \frac{1}{10,000}$	$\frac{1}{10,000} = 10^{-4}$