



Logarithms - Convert Logarithm to Exponent - Fraction Value

1 Convert the given logarithm to the equivalent in exponent form

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

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

2 Convert the given logarithm to the equivalent in exponent form

$$\log_6 \frac{1}{216} = -3$$

A	B
$-3^{\frac{1}{216}} = 6$	$-3^6 = \frac{1}{216}$
C	D
$6^{-3} = \frac{1}{216}$	$\frac{1}{216}^6 = -3$

3 Convert the given logarithm to the equivalent in exponent form

$$\log_9 \frac{1}{81} = -2$$

A	B	C	D
$9^{-2} = \frac{1}{81}$	$-2^{\frac{1}{81}} = 9$	$-2^9 = \frac{1}{81}$	$\frac{1}{81}^9 = -2$

4 Convert the given logarithm to the equivalent in exponent form

$$\log_7 \frac{1}{49} = -2$$

A	B	C	D	E
$\frac{1}{49}^{-2} = 7$	$-2^{\frac{1}{49}} = 7$	$-2^7 = \frac{1}{49}$	$\frac{1}{49}^7 = -2$	$7^{-2} = \frac{1}{49}$

5 Convert the given logarithm to the equivalent in exponent form

$$\log_5 \frac{1}{125} = -3$$

A	B	C
$-3^5 = \frac{1}{125}$	$5^{-3} = \frac{1}{125}$	$\frac{1}{125}^{-3} = 5$

6 Convert the given logarithm to the equivalent in exponent form

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

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

7 Convert the given logarithm to the equivalent in exponent form

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

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

8 Convert the given logarithm to the equivalent in exponent form

$$\log_2 \frac{1}{8} = -3$$

A	B	C
$2^{-3} = \frac{1}{8}$	$\frac{1}{8}^2 = -3$	$-3^2 = \frac{1}{8}$

D
$\frac{1}{8}^{-3} = 2$