Name:							



Math worksheet on 'Logarithms - Meaning, Words to Equation as Question Mark (Fractions) (Level 1)'.

Part of a broader unit on 'Logarithms - Intro'

Learn online: app.mobius.academy/math/units/logarithms intro/

Which logarithm equation answers this?

What number would you raise $\frac{1}{10}$ by to result in $\frac{1}{1,000}$?

$\log_{\frac{1}{1,000}}?=\frac{1}{10}$	b	$\log_{\frac{1}{10}} \frac{1}{1,000} = ?$
$\log_{?} \frac{1}{1,000} = \frac{1}{10}$	d	$\log_{?}\frac{1}{10}=\frac{1}{1,000}$

Which logarithm equation answers this?

What number would you raise $\frac{1}{2}$ by to result in $\frac{1}{4}$?

a	b		C			d		
$\log_{\frac{1}{2}}\frac{1}{4}=?$	$\log_{\frac{1}{4}}$	$\frac{1}{2} = ?$	log _?	$\frac{1}{4} =$	$\frac{1}{2}$	log _?	$\frac{1}{2} =$	$\frac{1}{4}$

Which logarithm equation answers this?

What number would you raise $\frac{1}{2}$ by to result in $\frac{1}{8}$?

a
$$\log_{\frac{1}{8}}? = \frac{1}{2}\log_{?}\frac{1}{2} = \frac{1}{8}\log_{?}\frac{1}{8} = \frac{1}{2}\log_{\frac{1}{2}}\frac{1}{8} = ?$$

Which logarithm equation answers this?

What number would you raise $\frac{1}{9}$ by to result in $\frac{1}{81}$?

а	$\log_{\frac{1}{81}} \frac{1}{9} = ?$	b	$\log_? \frac{1}{81} = \frac{1}{9}$
C	$\log_{\frac{1}{9}}\frac{1}{81}=?$	d	$\log_? \frac{1}{9} = \frac{1}{81}$

Which logarithm equation answers this?

What number would you raise

 $\frac{1}{6}$ by to result in $\frac{1}{216}$?

a	$log_{\frac{1}{216}}? = \frac{1}{6}$	$\log_{\frac{1}{6}} \frac{1}{216} = ?$	
C	$\log_? \frac{1}{6} = \frac{1}{216}$	$\log_{\frac{1}{216}} \frac{1}{6} = ?$	

Which logarithm equation answers this?

What number would you raise $\frac{1}{6}$ by to result in $\frac{1}{36}$?

а	$\log_{\frac{1}{36}}\frac{1}{6}=?$	b	$\log_? \frac{1}{36} = \frac{1}{6}$
C	$\log_{\frac{1}{6}}\frac{1}{36}=?$	d	$\log_? \frac{1}{6} = \frac{1}{36}$

Which logarithm equation answers this?

What number would you raise

1		¹ 1
_	by to result in	105 (
5		125

	5	125	
a	$\log_? \frac{1}{125} = \frac{1}{5}$	$\log_{\frac{1}{5}} \frac{1}{125} = ?$	
C	$\log_{rac{1}{125}}?=rac{1}{5}$	$\log_{?} \frac{1}{5} = \frac{1}{125}$	