Logarithms - Meaning, Words to Equation as Question Mark (Fractions)

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1 Which logarithm equation answers this?

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

A	$\log_{\frac{1}{81}} \frac{1}{9} = ?$	B	$\log_? \frac{1}{9} = \frac{1}{81}$
C	$\log_{\frac{1}{9}} \frac{1}{81} = ?$	D	$\log_{\frac{1}{81}} ? = \frac{1}{9}$

2 Which logarithm equation answers this?

What number would you raise $\frac{1}{5}$ by to result in $\frac{1}{125}$?

A	$\log_{\frac{1}{125}} ? = \frac{1}{5}$	B	$\log_{\frac{1}{5}} \frac{1}{125} = ?$
C	$\log_? \frac{1}{5} = \frac{1}{125}$	D	$\log_{\frac{1}{125}} \frac{1}{5} = ?$

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3 Which logarithm equation answers this?

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

A	$\log_{\frac{1}{2}} \frac{1}{4} = ?$	B	$\log_? \frac{1}{4} = \frac{1}{2}$	C	$\log_{\frac{1}{4}} \frac{1}{2} = ?$

4 Which logarithm equation answers this?

What number would you raise $\frac{1}{5}$ by to result in $\frac{1}{25}$?

A	$\log_{\frac{1}{5}} \frac{1}{25} = ?$	B	$\log_? \frac{1}{25} = \frac{1}{5}$
C	$\log_{\frac{1}{25}} \frac{1}{5} = ?$	D	$\log_? \frac{1}{5} = \frac{1}{25}$

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5 Which logarithm equation answers this?

What number would you raise $\frac{1}{3}$ by to result in $\frac{1}{81}$?

A	$\log_? \frac{1}{81} = \frac{1}{3}$	B	$\log_{\frac{1}{81}} \frac{1}{3} = ?$
C	$\log_{\frac{1}{3}} \frac{1}{81} = ?$	D	$\log_? \frac{1}{3} = \frac{1}{81}$

6 Which logarithm equation answers this?

What number would you raise $\frac{1}{2}$ by to result in $\frac{1}{16}$?

A	$\log_{\frac{1}{2}} \frac{1}{16} = ?$	B	$\log_{\frac{1}{16}} \frac{1}{2} = ?$
C	$\log_{\frac{1}{16}} ? = \frac{1}{2}$	D	$\log_? \frac{1}{2} = \frac{1}{16}$

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7 Which logarithm equation answers this?

What number would you raise $\frac{1}{3}$ by to result in $\frac{1}{9}$?

A	$\log_? \frac{1}{3} = \frac{1}{9}$	B	$\log_{\frac{1}{9}} ? = \frac{1}{3}$	C	$\log_? \frac{1}{9} = \frac{1}{3}$	D	$\log_{\frac{1}{3}} \frac{1}{9} = ?$

8 Which logarithm equation answers this?

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

A	$\log_{\frac{1}{36}} ? = \frac{1}{6}$	B	$\log_? \frac{1}{36} = \frac{1}{6}$
C	$\log_{\frac{1}{6}} \frac{1}{36} = ?$	D	$\log_{\frac{1}{36}} \frac{1}{6} = ?$