

Evaluate Using Change of Base Rule

Evaluate each expression.

Example: $\log_4 8$

$$\log_4 8 = \frac{\log_2 8}{\log_2 4}$$

$$= \frac{\log_2 2^3}{\log_2 2^2} = \frac{3 \log_2 2}{2 \log_2 2}$$

$$= \frac{3}{2}$$

$\log_{27} 9$ Answer: _____	
$\log_8 32$ Answer: _____	
$\log_{125} 625$ Answer: _____	