

# Converting from Logarithmic to Exponential Form

Convert each equation from logarithmic form to exponential form or from exponential to logarithmic.  $y = \log_b x \Leftrightarrow b^y = x$

**Example:**  $\log_{11} 121 = 2$   
 $11^2 = 121$

1.  $5^3 = 125$

2.  $10^6 = 1,000,000$

3.  $\log_{10} 1 = 0$

4.  $\log_3 \frac{1}{243} = -5$

5.  $7^5 = 16,807$

6.  $y = \log x$

7.  $12^x = 87$

8.  $y = \log_{15} 30$

9.  $y = \log_a x$

10.  $y = \log_{180} B$

11.  $10^y = x$

12.  $\log_b 64 = 3$

13.  $\log_x 5 = 10$

14.  $7^x = 343$