

Math 111 Worksheet #7
October 23, 2007

1. Write the following in exponential form.

(a) $\log_6 216 = 3$

(b) $\log \sqrt[3]{10} = \frac{1}{3}$

(c) $\ln e^2 = 2$

2. Write the following in logarithmic form.

(a) $2^3 = 8$

(b) $10^{-2} = .01$

3. Find the following.

(a) $10^{\log 5}$

(b) $\ln(e^3)$

(c) $e^{\ln(t^2+3)}$

(d) $\log(10^{25-t})$

(e) $\log 10000$

(f) $\ln 5$

4. Solve the following equations.

(a) $4^x = 512$

(b) $5(16^t) = 160$