Math 1050 Logarithm Practice Page
(Use no calculators except on # 9)

1. $4^{3x} = 8^{x+4}$

2. $\left(\frac{1}{27}\right)^{x-1} = 9^{2x}$

3. $\log_8 64 =$

4. $\log_2 \sqrt{8} =$

5. $\log_x\left(\frac{1}{49}\right) = -2$

6. $\log_4 x = \frac{3}{2}$

7. $\log_k 4 = 1$

8. $\log_b b^2 = 2$

9. pH = -log[H^+]

   If $[H^+] = 4.0 \times 10^{-7}$ What is the pH?

   If pH = 4.6 Find $[H^+]$?

10. $\log_5(y+6)^3 = 2$

11. log (2x+3) = 1 + log x

12. log $x^2 = 2$

13. $e^{2x} + 3e^x - 10 = 0$