

**Business PreCalculus**    MATH 1643 Section 004, Spring 2014  
**Worksheet 25**

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**1-** Find the domain of  $f(x) = \log_3(x + 8)$ .

**2-** Evaluate the following logarithms:

**a.**  $\log_{100} 100$ .

**b.**  $\log_5 5^{10}$ .

**3-** Write each logarithmic equation in exponential form:

**a.**  $\log_{1/5} 5 = -1$ .

**b.**  $\ln 2 = x$ .

**4-** Convert each exponential equation into logarithmic form:

**a.**  $(49)^{-1/2} = \frac{1}{7}$ .

**b.**  $(\frac{1}{16})^{1/2} = \frac{1}{4}$ .

**5-** Solve each equation:

**a.**  $\log_a(x - 1) = 0$ .

**b.**  $\log_5(x + 1) = -2$ .