

**PC Sp15 Week 2 HW**

Name \_\_\_\_\_ PER \_\_\_\_\_ DATE \_\_\_\_\_

**Simplify.**

1.  $16^{2.5}$

2.  $(9^{-3})^{\frac{1}{6}}$

3.  $(4^{\sqrt{3}})^{\sqrt{3}}$

**Write in exponential form:**

4.  $\sqrt{x^5 y^4}$

5.  $\sqrt[5]{x^4 y^{-6}}$

**Write each equation in exponential form**

6.  $\log_2 \frac{1}{8} = -3$

7.  $\log 100000 = 5$

**Write each equation in logarithmic form.**

8.  $6^2 = 36$

9.  $10^{-5} = .000001$

**Solve for x.**

10.  $\log_5 x = 2$

11.  $\log_x \frac{1}{16} = -2$