**3.4 Exponential and Logarithmic Equations**

**Objective: Solve exponential and log equations**

**Strategies to Solve:**

1. One to One: rewrite so the bases are the same and compare
2. Rewrite exponential in log form and apply the Inverse Property
3. Rewrite log in exponential form and apply the Inverse Property

**Example:**

x = 4 One to One

ln x – ln 2 = 0 ln x = ln 2 x = 2 One to One

x = 3 Inverse

2x = 4 x = 2 Inverse

***Solve:***

ln (6x – 1) = 3

You have deposited $600 in an account that pays 7.5% interest compounded continuously. Use the , where P is in initial deposit r is the percent (written as decimal) and t is the time in years. How long will it take to double your money? Triple?

**Homework**

**Pg 251 #13 – 23 (odd), 33 – 43 (odd), 71, 73, 81 – 93 (odd), 117, 129**