**3.1 – Exponential Functions and Their Graphs**

**3.2 Logarithmic Functions and Their Graphs**

**Objective: Evaluate exponential functions with base a (and base e) and use exponential functions to model real-life problems**

**Evaluate logarithmic functions**

**Exponential Function:** a function with a variable as exponent

where

*Transformation***:**

**Logarithmic Function with Base a:**

where

*Transformation***:**

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**Natural Logarithmic Function:**

**Natural Base e:**

**Properties of Logarithms**

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*Examples!*

**Homework**

**Graph: Pg 224 #13-17, 22, 39, 41, 67 Pg 234 #37, 38, 42  
  
Simplify: Pg 234 #7-21 (odd), 79-81**