Calculus Section 5.5 Exponential Functions w/ Function Bases  
-Determine the derivative of exponential functions with functions as bases

Homework: page 362 #’s 63, 64, 67-70

When you have a function raised to a function power, use to differentiate.

**Example) Example)**  
Find for y = xx Find the equation of the line tangent to   
 at x = .

**A Special Limit Involving e**

**Proof:**