Calculus Section 9.8 Radius and Interval of Convergence II  
-Determine the endpoint convergence of a power series  
-Differentiate and integrate a power series

Homework: page 654 #’s 45 – 47, 73 – 75

**Derivative and Integral of a Power Series**In order to find the derivative or integral of a power series, derive or integrate with respect to x using the respective power rules.

For each derivative or antiderivative or a power series, the radius and interval of convergence will remain the same. The only change may be whether the endpoints are included/excluded.

Integrating: brackets remain Differentiating: parenthesis remain

**Examples) Find the Interval of Convergence for f(x), f‘(x), f’’(x), and**1) f(x) = 

2)