

# § 35 Power Series

$$\text{Let } f(x) = \sum_{j=0}^{\infty} a_j x^j$$

Then  $\exists \ 0 \leq R \leq \infty$  s.t.  
 $\sum_{j=0}^{\infty} a_j x^j$  converges absolutely  
for  $0 \leq |x| < R$ .  
and diverges for  
 $|x| > R$