$a_1, a_2, \ldots, a_m$ . If  $\gamma$  is a closed rectifiable curve in G which does not pass through any of the points  $a_k$ and if  $\gamma \approx 0$  in G then  $\frac{1}{2\pi i} \int_{\gamma} f = \sum_{i=1}^{m} n(\gamma; a_k) \operatorname{Res}(f; a_k).$ 

Theorem 1 (Residue Theorem). Let f be analytic in the region G except for the isolated singularities

Theorem 2 (Maximum Modulus). Let G be a bounded open set in  $\mathbb{C}$  and suppose that f is a

continuous function on 
$$G^-$$
 which is analytic in  $G$ . Then 
$$\max\{|f(z)|:z\in G^-\}=\max\{|f(z)|:z\in\partial G\}.$$

 $\max\{|f(z)| : z \in G^-\} = \max\{|f(z)| : z \in \partial G\}.$ 

 $a\alpha b\beta c\partial d\delta e \epsilon f \zeta \xi g \gamma h h h i i j j k κ λ l \ell \lambda m n η θ θ ο σ ς φφρρρο grst τ π u μν υ υ ω ω χ χ ψ <math>z \sim \infty 0$  d δ  $\ni$