Theorem 1 (Residue Theorem). Let f be analytic in the region G except for the isolated singularities $a_1, a_2, \dots, a_m$. If γ 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

$$\operatorname*{Res}_{z=a} f(z) = \operatorname*{Res}_{a} f = \frac{1}{2\pi \mathrm{i}} \int\limits_{C} f(z)\, \mathrm{d}z,$$

where $C \subset D \backslash \{a\}$ is a closed line $n(C, a) = 1$ (e. g. a counterclockwise circle loop).

$\mathrm{A\Lambda\Delta\nabla BCD\Sigma EF\Gamma GHIJ}KLMNO\mathrm{\Theta\Omega P\Phi\Pi\Xi}\mathsf{QRST}UVWXY\mathrm{\Upsilon\Psi Z}$ $\mathsf{ABCDabcd1234}$

$a\alpha b\beta c\partial d\delta e\epsilon\varepsilon f\zeta\xi g\gamma h\hbar\iota i\imath\jmath jk\kappa l\ell\lambda mn\eta\theta\vartheta o\sigma\varsigma\phi\varphi\wp p\rho\varrho qrst\tau\pi u\mu\nu v\upsilon w\omega\varpi$

$\boldsymbol{xyz}\infty \propto \emptyset \boldsymbol{y} = \boldsymbol{f}(\boldsymbol{x})$ $\textstyle\sum \int \prod$ $\displaystyle\prod \int \sum$ $\textstyle\sum_a^b \int_a^b \prod_a^b$ $\displaystyle\sum_a^b \int_a^b \prod_a^b$