



Math for the people, by the people.

residue

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Let $U \subset \mathbb{C}$ be a domain and let $f : U \longrightarrow \mathbb{C}$ be a function represented by a Laurent series

$$f(z) := \sum_{k=-\infty}^{\infty} c_k (z - a)^k$$

centered about a . The coefficient c_{-1} of the above Laurent series is called the *residue* of f at a , and denoted $\text{Res}(f; a)$.