

Stokes' Theorem

Theorem 1. Let V be an oriented compact smooth k -manifold with boundary in the oriented smooth k -manifold $M \subset \mathbb{R}^n$. If ∂V has the positive orientation, and α is a C^1 differential $(k-1)$ -form on an open set containing V , then

$$\int_V d\alpha = \int_{\partial V} \alpha.$$