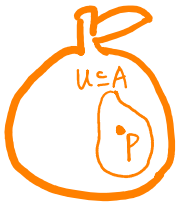


$A \subseteq \mathbb{R}^n$

$g : A \to B$

diffeomorphism

$g|_U : U \to V$ defines a local diffeo

$g|_U(\vec{p}) = g(\vec{p}) = \vec{q}$

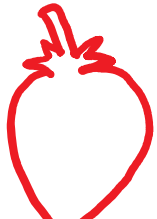
$B \subseteq \mathbb{R}^n$

$f : B \to \mathbb{R}$

continuous

If $f(\vec{x}) = 0 \ \forall \vec{x} \notin \text{supp}(f)$

$\Rightarrow \int_B f = \int_V f$



$\mathbb{R}$