

Untitled1

$$\iiint_E f(x, y, z) dV = \int_c^d \int_\alpha^\beta \int_a^b f(\rho \sin \phi \cos \theta, \rho \sin \phi \sin \theta, \rho \cos \phi) \rho^2 \sin \phi \, d\rho \, d\theta \, d\phi$$

Where $E = \{(\rho, \theta, \phi) : a \leq \rho \leq b, \alpha \leq \theta \leq \beta, c \leq \phi \leq d\}$

$\iiint_E f(x,y,z)dV =$

$\int_c^d \left\{ \int_\alpha^\beta \left\{ \int_a^b f(\rho \sin \phi \cos \theta, \rho \sin \phi \sin \theta, \rho \cos \phi) \rho^2 \sin \phi \, d\rho \right\} d\theta \right\} d\phi$ newline

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