$$V_n(R) = \frac{\pi^{n/2}}{\left(\frac{n}{2}\right)!} R^n$$

$$S_n(R) = \frac{2\pi^{n/2}}{\Gamma\left(\frac{n}{2}\right)} R^{n-1}$$

$$\Gamma(\nu) = (\nu - 1)!$$

$$\Gamma\left(\tfrac{n}{2}\right) = \left(\tfrac{n}{2} - 1\right)!$$

$$\frac{dV_n(R)}{dR}$$

3ieta

3'

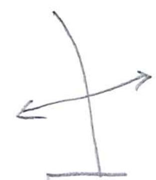
ouwen antelhe

$$E - \tfrac{1}{2}\Delta \ , \ E + \tfrac{1}{2}\Delta$$

$$E - \tfrac{1}{2}\Delta \leq \sum_{i=1}^{N} \frac{p_i^2}{2m} \leq E + \tfrac{1}{2}\Delta$$

$$2m(E - \tfrac{1}{2}\Delta) < \quad \leq 2m(E + \tfrac{1}{2}\Delta)$$

$$(2mE - m\Delta) \leq \quad \leq (2mE + m\Delta)$$



$\sqrt{2mE}$

$$\times\ \Delta\left(\frac{m}{2E}\right)^{1/2} = \Delta\left(\frac{m}{2E}\right)^{1/2} \cdot \frac{2\pi^{\frac{3N}{2}}}{\left(\frac{3N}{2} - 1\right)!} \cdot (2mE)^{\frac{3N-1}{2}}$$

$$V^N \times$$