

4015A

6511 WKB

$$V(x) = C|x|^\alpha$$

$$\int p(x) dx = \int \sqrt{2M(E - C|x|^\alpha)} dx$$

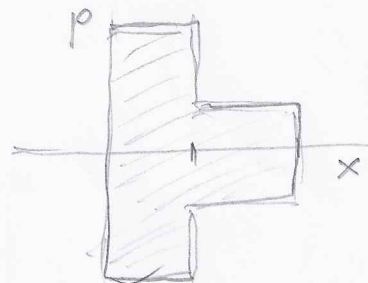
$$= 2 \sqrt{2ME} \cdot \left(\frac{E}{C}\right)^{1/\alpha} \cdot B(\alpha) = \left(\frac{1}{2} + n\right) \pi$$

$$E_n = \left[ \frac{C^{1/\alpha} \pi}{2 B(\alpha) \sqrt{2M}} \left(\frac{1}{2} + n\right) \right]^{\frac{2\alpha}{\alpha+2}}$$

$$V(x) = V_0 \text{sign}(x) \quad [a, b]$$

$$\int p(x) dx = \sum_{\pm} \sqrt{2M(E \pm V_0)} \cdot a$$

$$\sqrt{E+V_0} + \sqrt{E-V_0} = \frac{1}{\sqrt{2M}a} n\pi$$



$$E_n \equiv \frac{1}{2M} \left( \frac{\pi n}{2a} \right)^2$$

(wird 2/38  
"1/2" 5/16)

$$E_n = E_n + \frac{V_0^2/4}{E_n} \quad (\text{for } E > V_0)$$