(*)

$$k\frac{a}{2} = u \qquad k^2 = \frac{2m(E-V_0)}{\hbar^2}$$

$$q^2 = \frac{2m}{\hbar^2}E$$

$$k^2 + q^2 = -\frac{2mV_0}{\hbar^2}$$

1. primer, ko imamo sodo funkcijo:

$$tg\left(k\frac{a}{2}\right) = \frac{q}{k} \qquad tg(u) = \frac{qa}{2u}$$

$$u_0^2 = -\frac{2mV_0a^2}{4\hbar^2}$$

$$q^2 = -k_2^2 - \frac{2mV_0}{\hbar^2}$$

$$q^2 = -\left(\frac{2u}{a}\right)^2 - \frac{2mV_0}{\hbar^2}$$

$$q^2 = -\frac{4u^2}{a^2} - \frac{2mV_0}{\hbar^2} \quad / \left(\frac{a^2}{4}\right)$$

$$\frac{a^2}{4}q^2 = -u^2 - \frac{2mV_0a^2}{4\hbar^2}$$

$$\left(\frac{a}{2}\right)^2 q^2 = -u^2 + u_0^2 = u_0^2 - u^2$$

$$\frac{a}{2}q = \sqrt{u_0^2 - u^2}$$

$$tg(u) = \frac{q\frac{a}{2}}{k\frac{a}{2}} = \frac{\sqrt{u_0^2-u^2}}{u}$$

2. primer (liha funkcija)

$$\frac{q}{k} = -ctg\left(k\frac{a}{2}\right)$$

$$-ctg(u) = \sqrt{\left(\frac{u_0}{u}\right)^2 - 1}$$