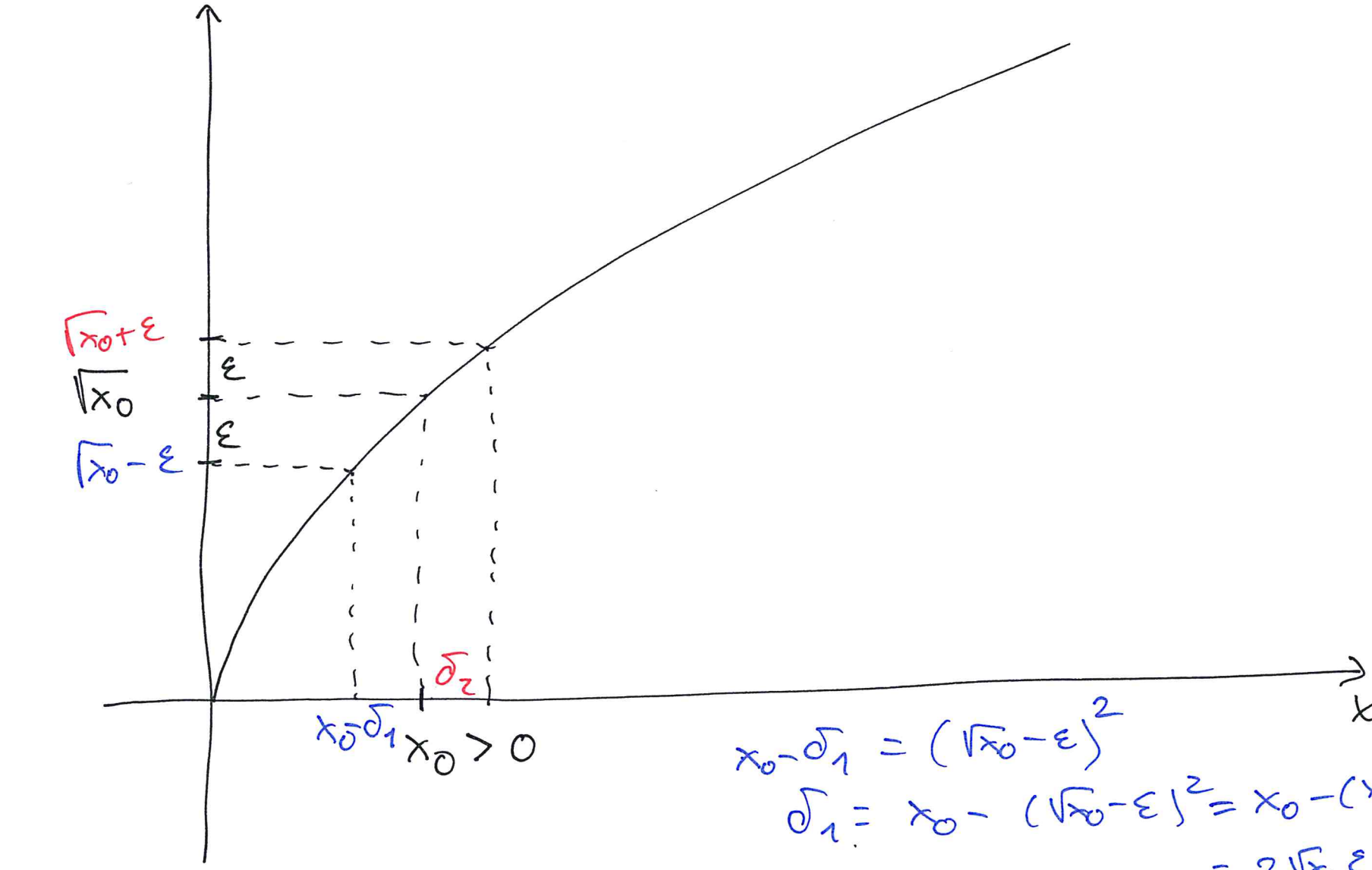


voglio $\varepsilon < \sqrt{x_0}$

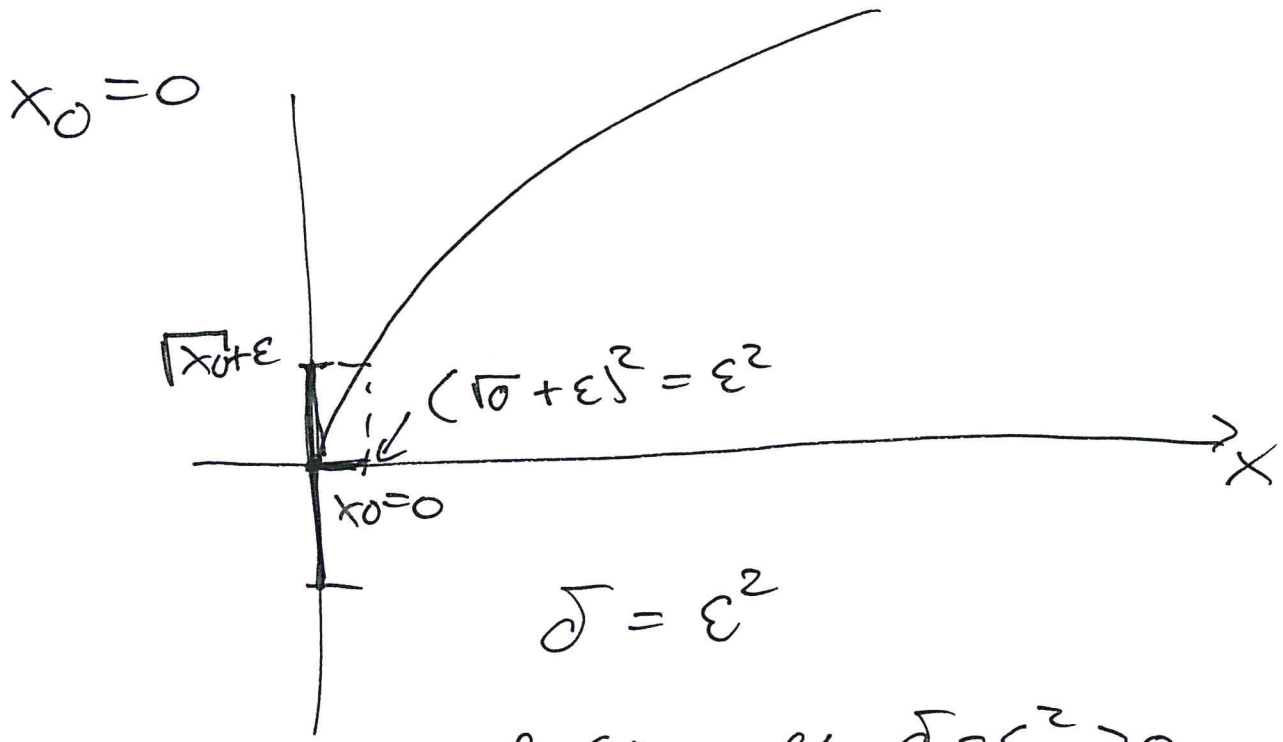
$$x_0-\delta_1 = (\sqrt{x_0}-\varepsilon)^2$$

$$\delta_1 = x_0 - (\sqrt{x_0}-\varepsilon)^2 = x_0-(x_0-2\sqrt{x_0}\varepsilon+\varepsilon^2)$$
$$= 2\sqrt{x_0}\varepsilon - \varepsilon^2$$

$$\delta_2 = (\sqrt{x_0}+\varepsilon)^2 - x_0 = x_0+2\varepsilon\sqrt{x_0}+\varepsilon^2-x_0$$
$$= 2\varepsilon\sqrt{x_0}+\varepsilon^2$$

$$\delta = \min\{\delta_1,\delta_2\} = \delta_1 = 2\sqrt{x_0}\varepsilon-\varepsilon^2$$

$\delta = \varepsilon(2\sqrt{x_0} - \varepsilon)$ .. rešitev je $\varepsilon < \sqrt{x_0}$, tedaj $\delta > 0$



$\delta = \varepsilon^2$

$\forall \varepsilon > 0$ se. $0 < \delta = \varepsilon^2 > 0$ ... $(\forall x \in (x_0, x_0+\delta)) \; (\sqrt{x} \in (-\varepsilon, \varepsilon))$