

$$y = \frac{x+3}{\sqrt{x+4} - 1}$$

$$x+4 \geq 0$$

$$x \geq -4$$

$$\sqrt{x+4} \neq 1$$

$$x \neq -3$$



$$\begin{aligned} D &= [-4, -3) \cup (-3, +\infty) \\ &= [-4, +\infty) \setminus \{-3\} \end{aligned}$$

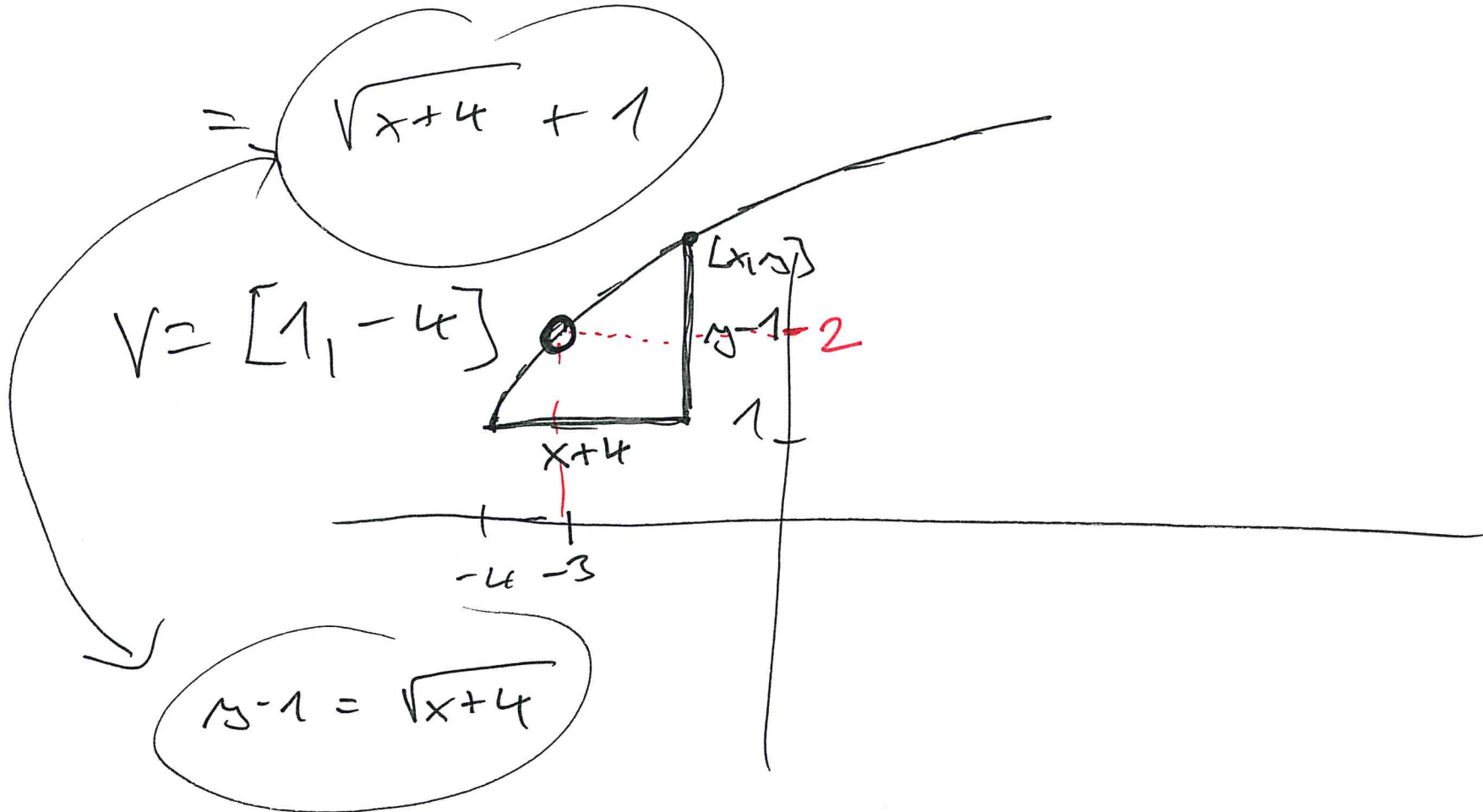
"0|0"

$$\frac{0.001}{0.000001} = 1000$$

$$\frac{0.000001}{0.001} = 0.001$$

$$(a-b)(a+b) = a^2 - b^2$$

$$y = \frac{(x+3)(\sqrt{x+4} + 1)}{(\sqrt{x+4} - 1)(\sqrt{x+4} + 1)} = \frac{\cancel{(x+3)}(\sqrt{x+4} + 1)}{\cancel{(x+4-1)}} = \sqrt{x+4} + 1$$



$$\lim_{x \rightarrow -3} \frac{x+3}{\sqrt{x+4} - 1} = 2$$