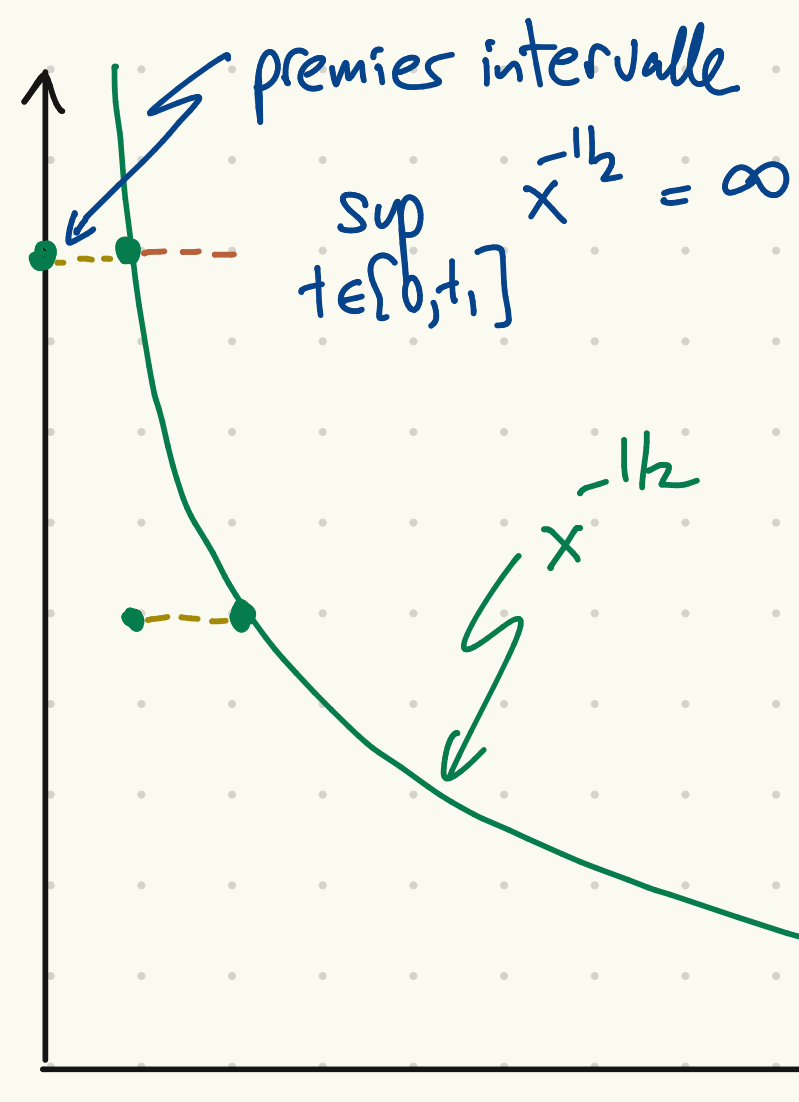
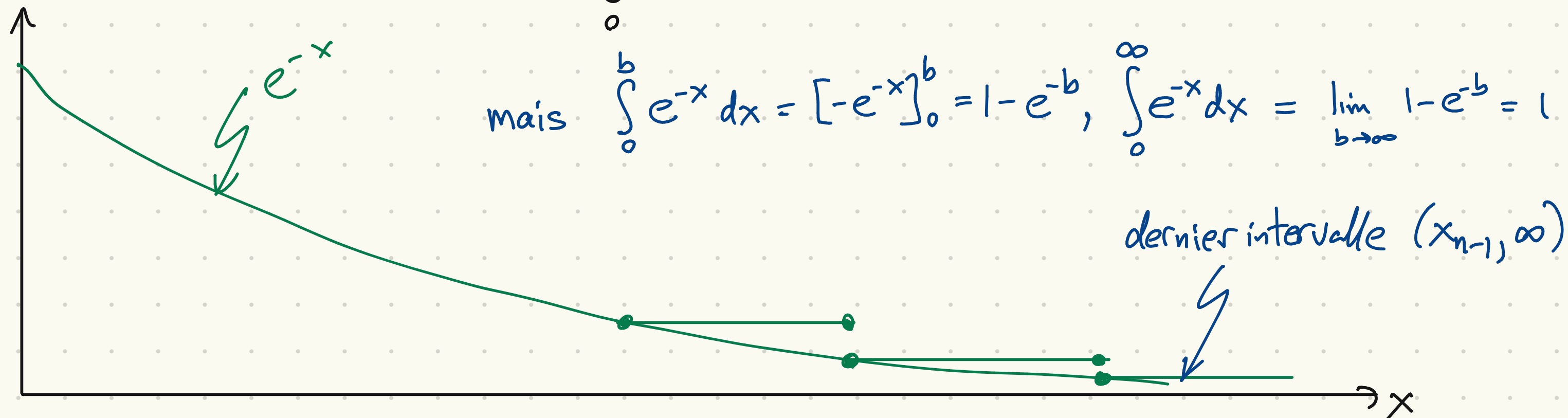


Deux cas où il faut des limites

$$\mathcal{U} \int_0^{\infty} e^{-x} = \infty$$

mais $\int_0^b e^{-x} dx = [-e^{-x}]_0^b = 1 - e^{-b}$, $\int_0^{\infty} e^{-x} dx = \lim_{b \rightarrow \infty} 1 - e^{-b} = 1$



$$\mathcal{U} \int_0^1 x^{-1/2} = \infty$$

mais $\int_c^1 x^{-1/2} dx = [2x^{1/2}]_c^1 = 2(1 - \sqrt{c})$, $\int_0^1 x^{-1/2} dx = \lim_{c \downarrow 0} 2(1 - \sqrt{c}) = 2$