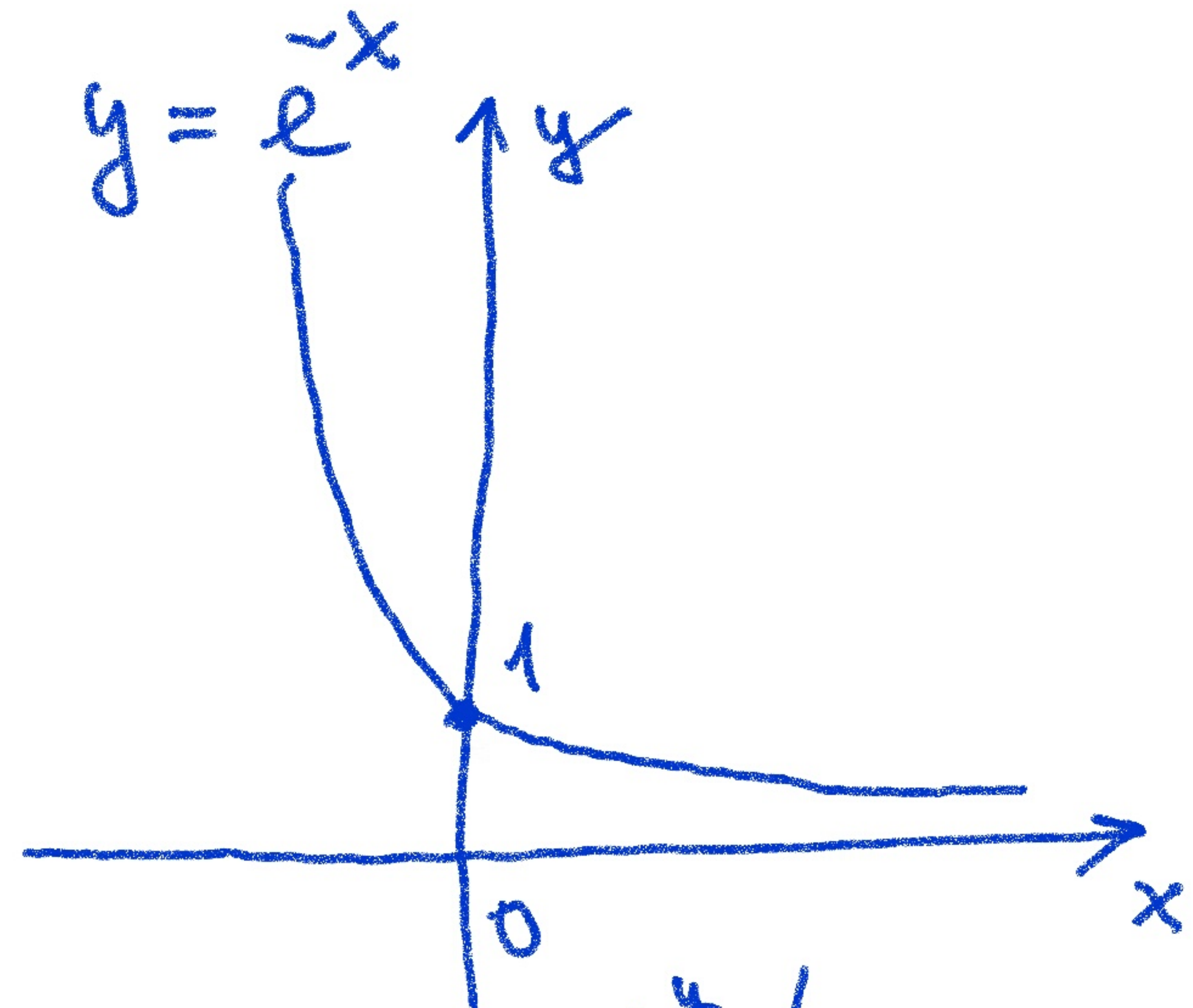
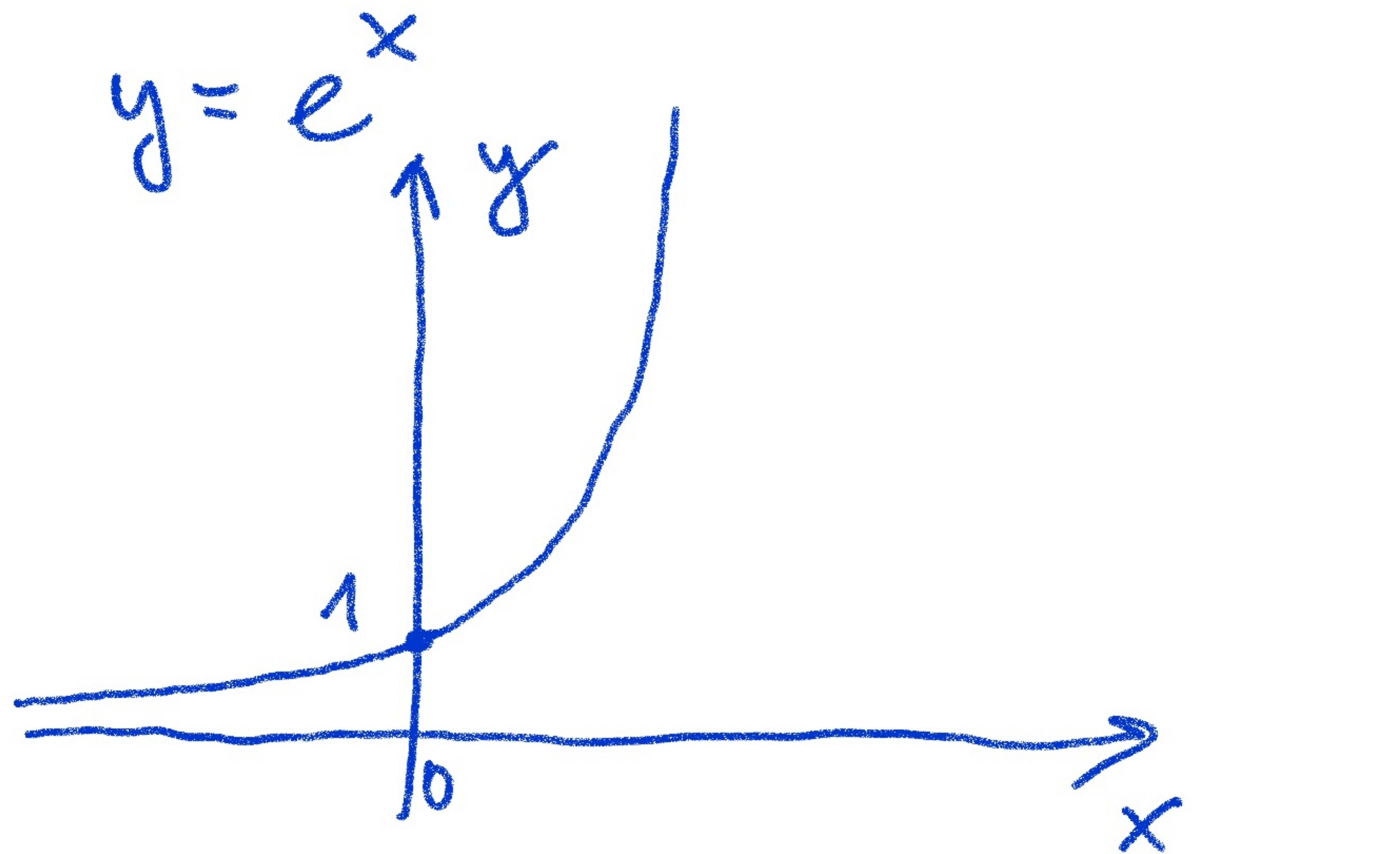
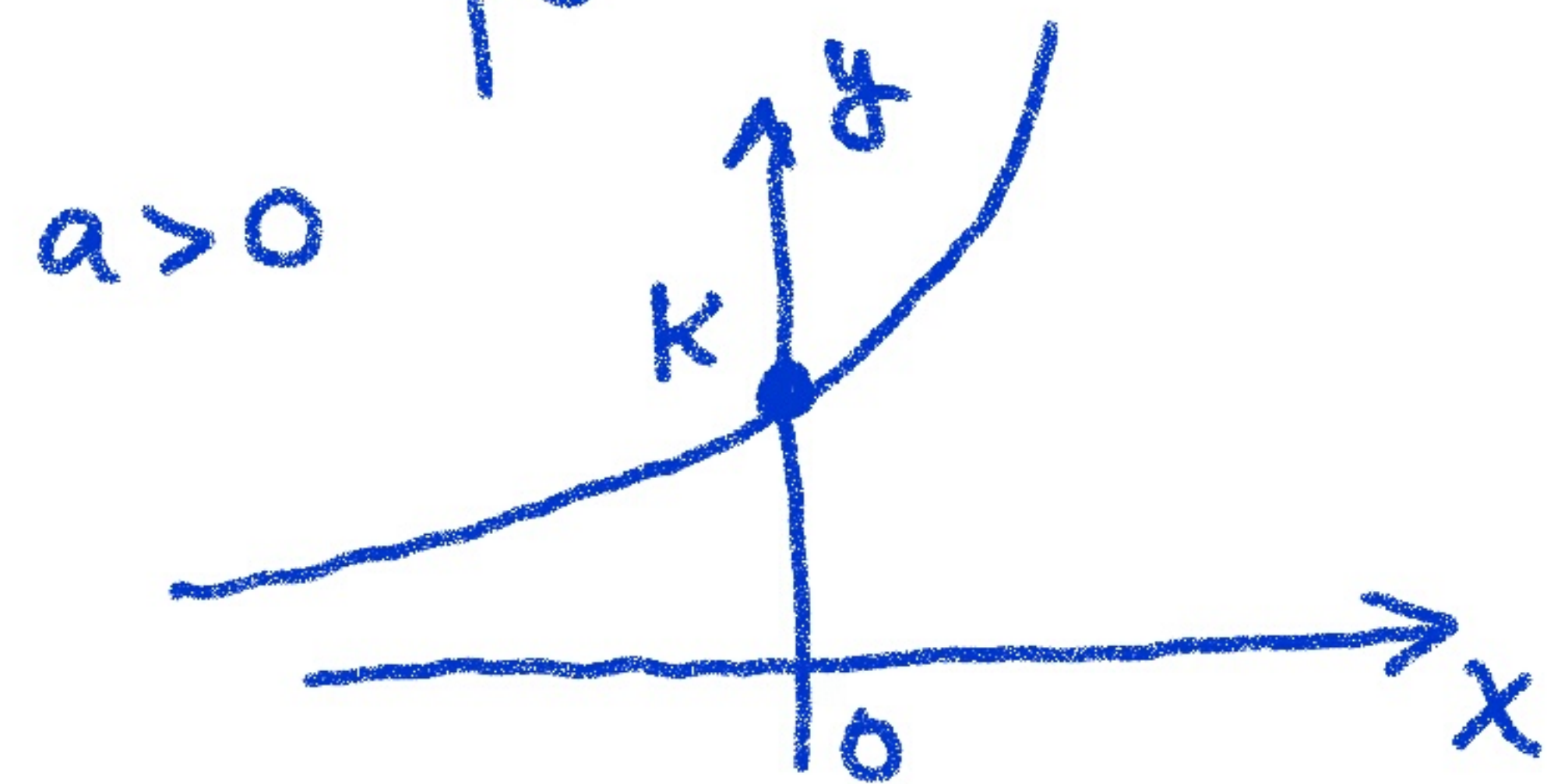


EXPONENCIÁLNÍ FUNKCE

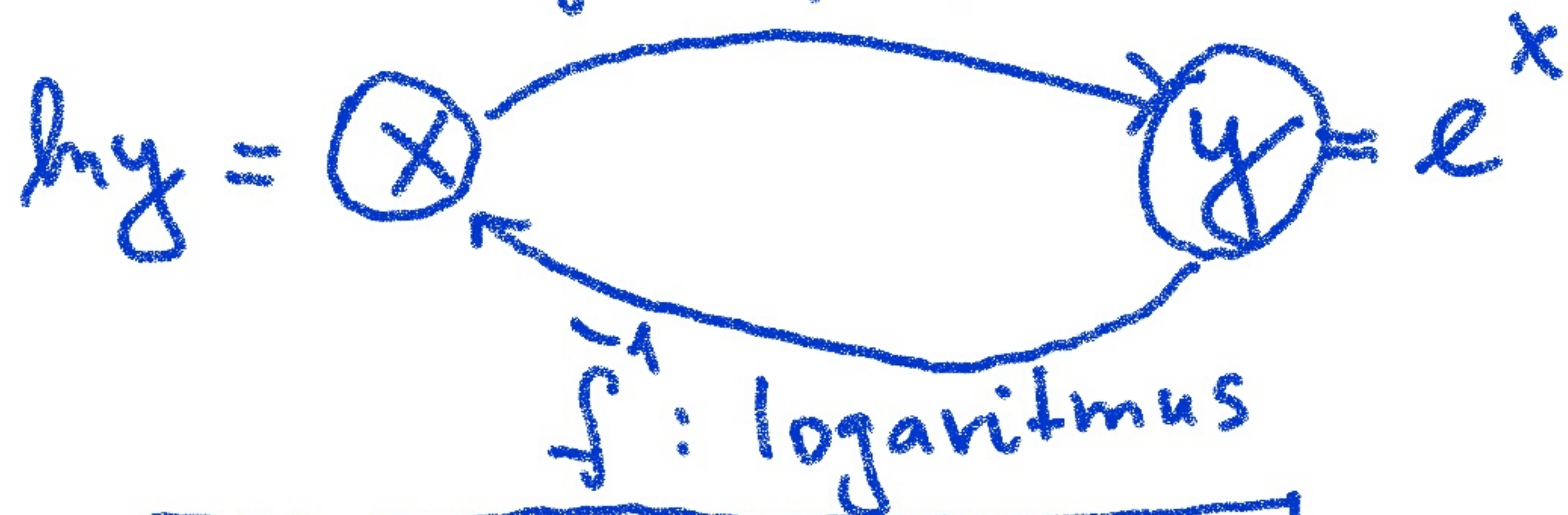


$$y = e^{ax+b} = e^{ax} \cdot \underbrace{e^b}_k = k \cdot e^{ax}$$



EXPONENCIALNI FUNKCE A LOGARITMUS

f: exp. fce



$$y = e^x \Leftrightarrow x = \ln y$$

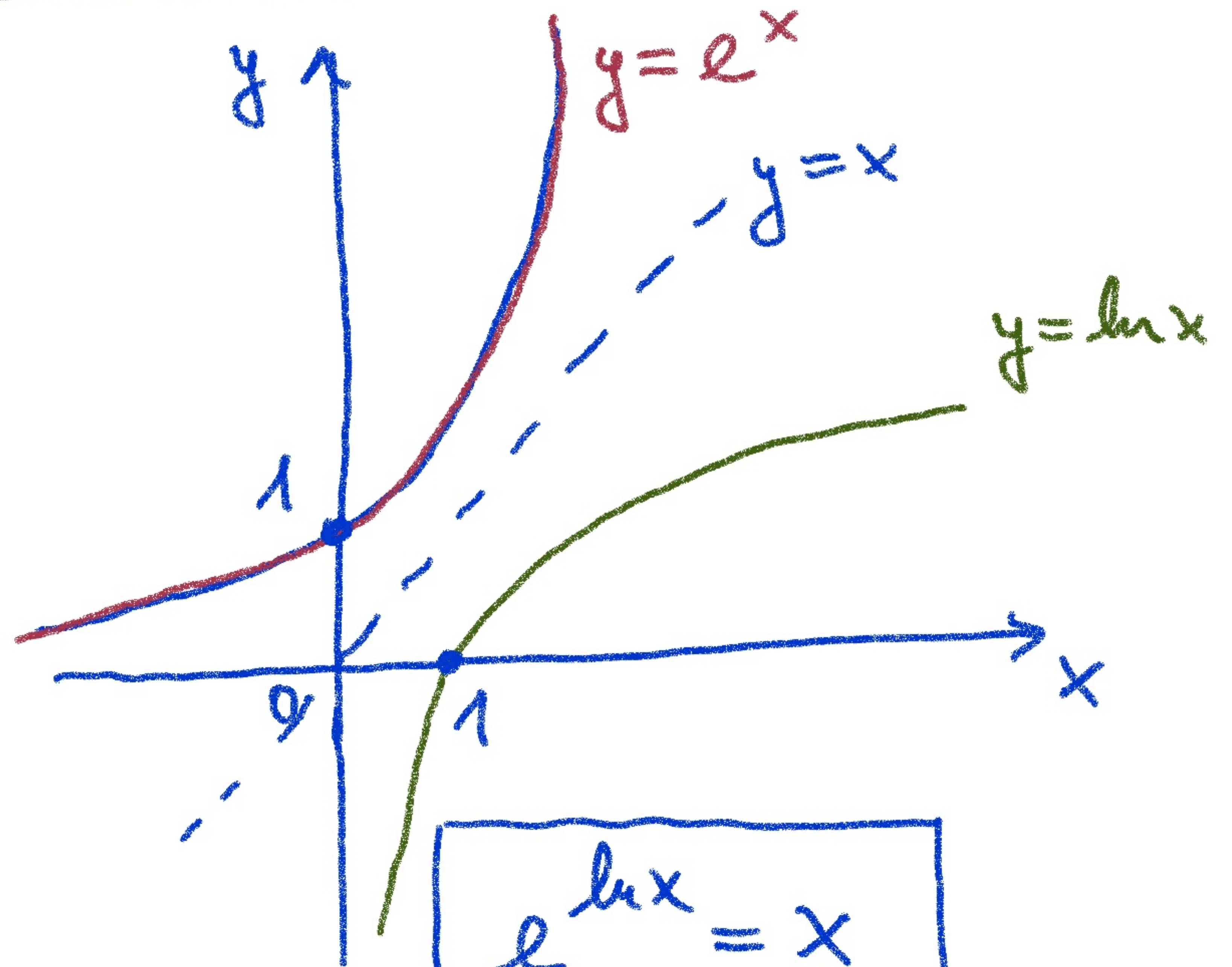
Př: $e^x = 8 \Rightarrow x = \ln 8$

$$\ln y = 5 \Rightarrow y = e^5$$

$$x^3 = y \Rightarrow x = \sqrt[3]{y}$$

$$x^3 = 5 \Rightarrow x = \sqrt[3]{5}$$

$$\sqrt[3]{y} = 7 \Rightarrow y = 7^3$$



$$e^{\ln x} = x$$
$$\ln e^x = x$$

CO SE HODÍ VĚDĚT

$$e^{x+y} = e^x \cdot e^y$$

$$e^{x-y} = e^x \cdot e^{-y} = \frac{e^x}{e^y}$$

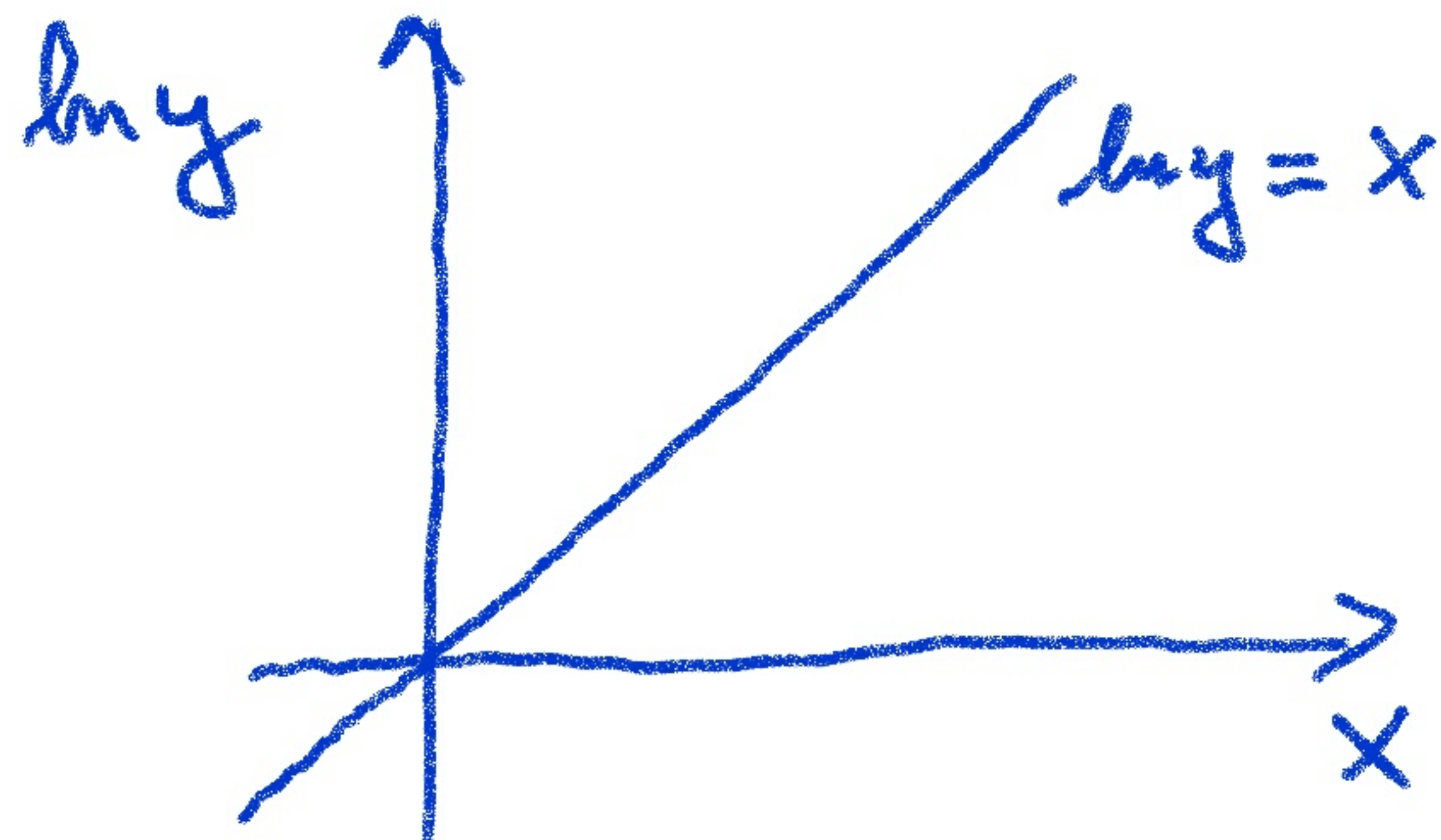
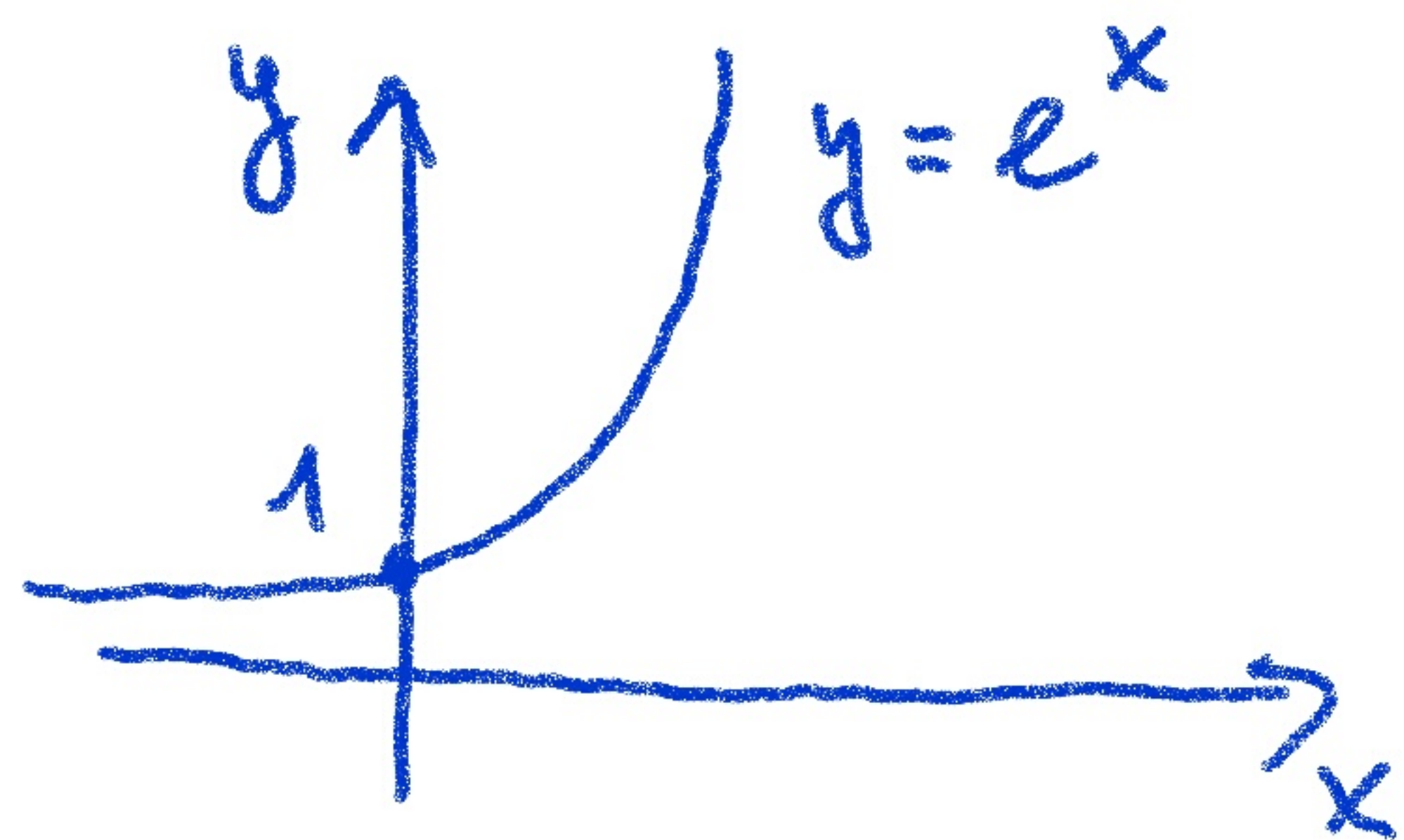
$$\ln x + \ln y = \ln(xy)$$

$$\ln x - \ln y = \ln \frac{x}{y}$$

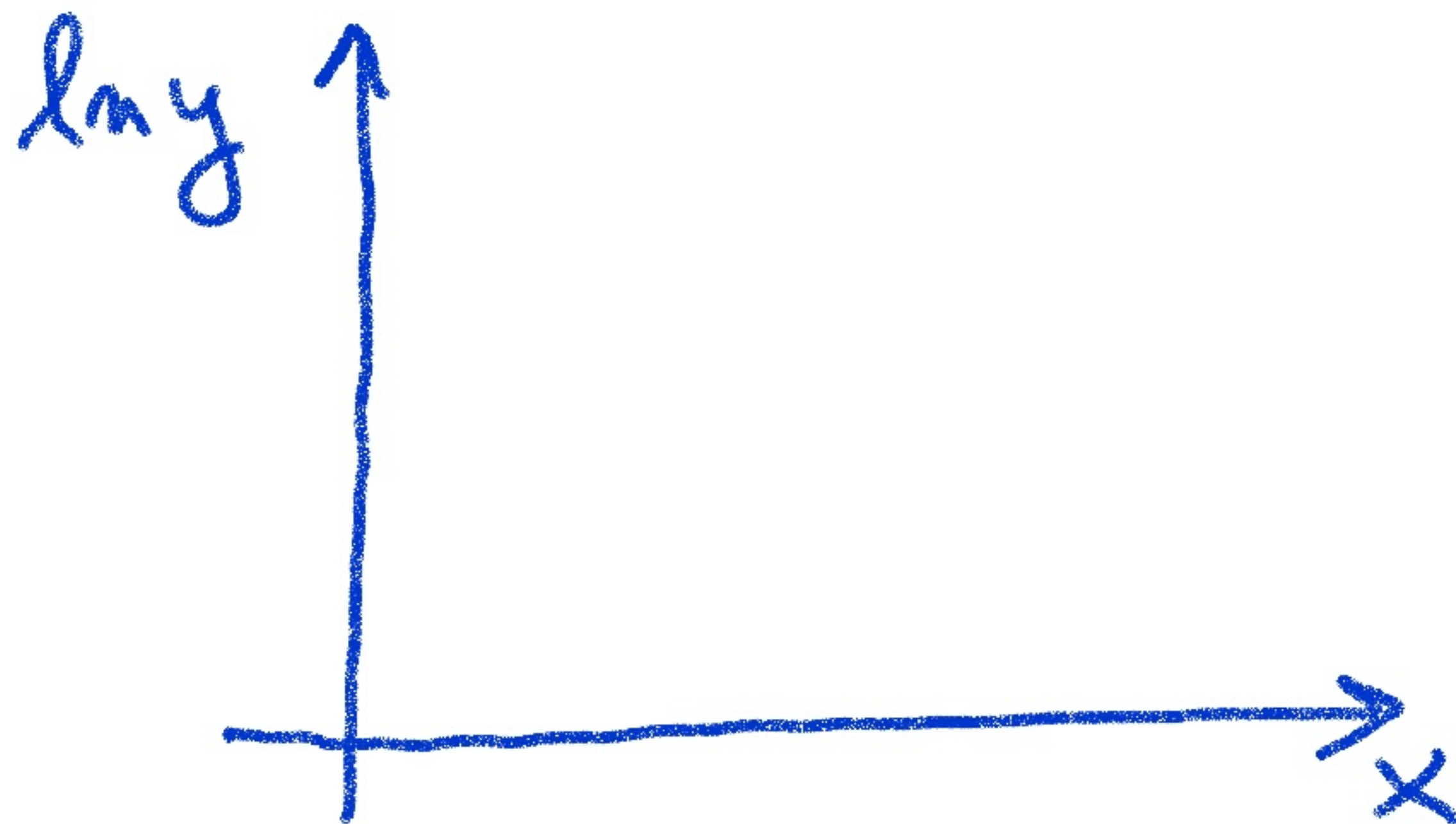
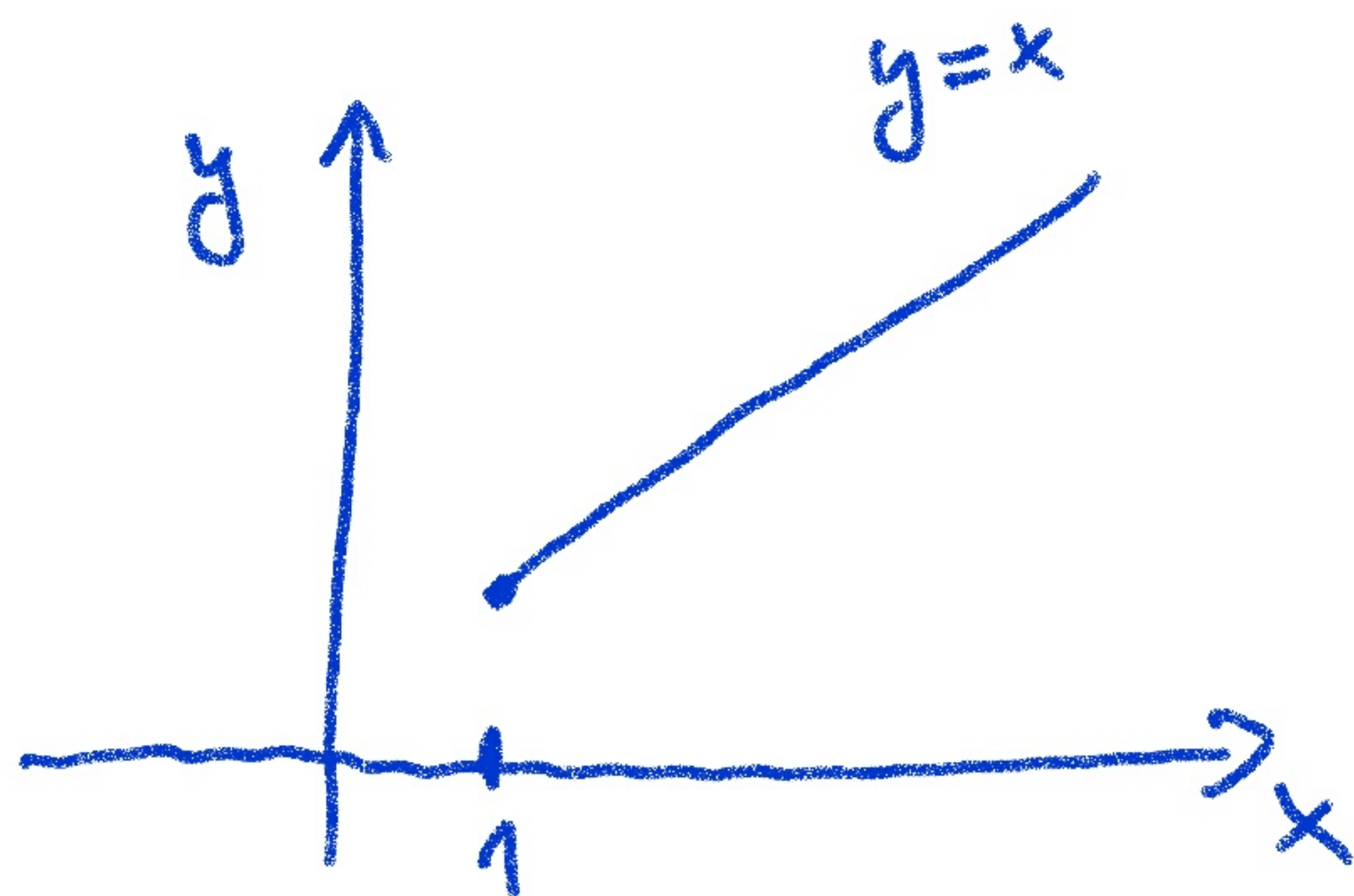
$$\ln x^c = c \cdot \ln x$$

$$\ln \frac{1}{x} = \ln x^{-1} = -\ln x$$

LOGARITMICKÉ MĚŘÍTKO NA SVISLÉ OSE



$$y = e^x$$
$$\ln y = \ln e^x$$
$$\ln y = x$$



$$y = x$$
$$\ln y = \ln x$$