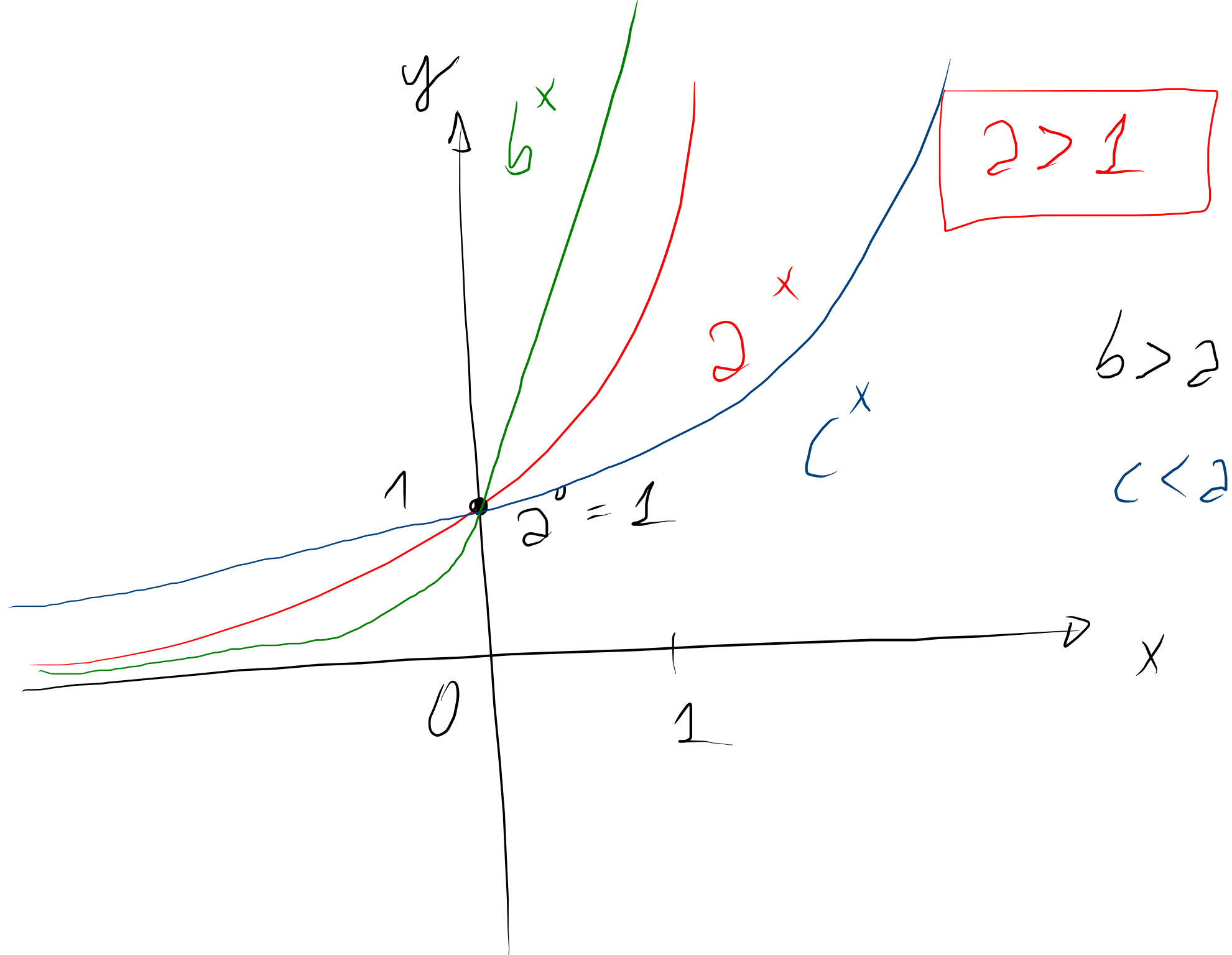
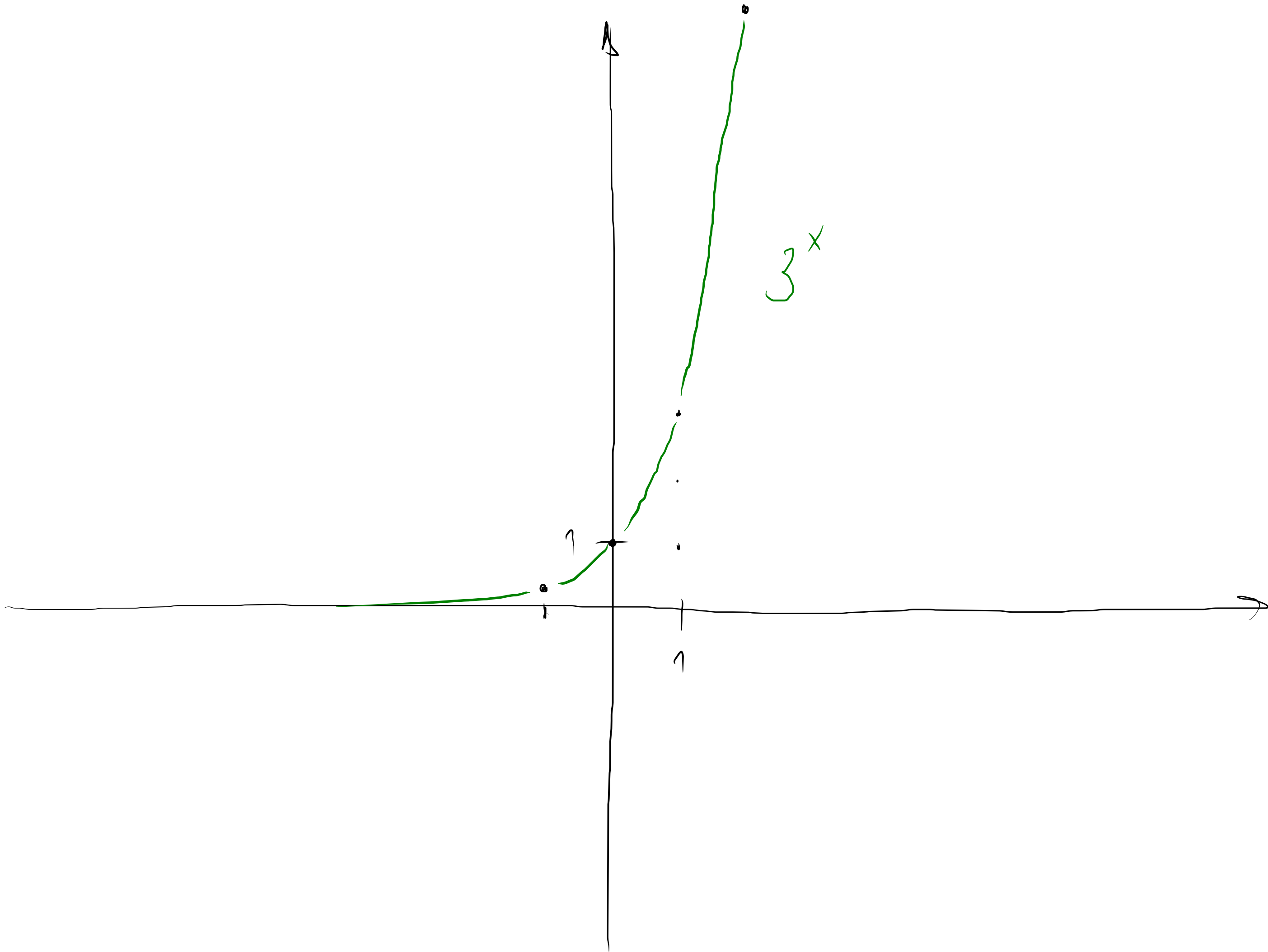


$$\log_5(0,04) = -2 = \log_5(5^{-2})$$

$$0,04 = \frac{4}{100} = \frac{2}{50} = \frac{1}{25} = \frac{1}{5^2} = 5^{-2}$$





$$\begin{cases} \log(x) - \log(y) = 1 \\ y = \frac{2}{x} \end{cases}$$

$$\log(2 \cdot x^{-1}) = \log 2 + \log(x^{-1})$$

$$= \log 2 - \log x$$

$$\log(x) - \log\left(\frac{2}{x}\right) = 1$$

$$\log(x) - (\log(2) - \log(x)) = 1$$

$$2 \log(x) = 1 + \log(2) = \log(10) + \log(2)$$

$$= \log(20)$$

$$\log(x) = \frac{1}{2} \log(20) = \log(20^{1/2}) = \log(\sqrt{20})$$
$$= \log(2\sqrt{2})$$

$$\log(x) + \log(y) = \log(x \cdot y)$$

$$\log(x^r) = r \log(x)$$

$$\log(x^{-1}) = -\log(x)$$

$$\begin{aligned} \log\left(\frac{x}{y}\right) &= \log(x \cdot y^{-1}) = \log(x) + \log(y^{-1}) \\ &= \log(x) - \log(y) \end{aligned}$$

$$\log(200) - \log(2) = \log(200) + (-1) \log(2)$$

$$= \log(200) + \log(2^{-1})$$

$$= \log(200 \cdot 2^{-1}) = \log(\cancel{2} \cdot 100 \cdot \cancel{2^{-1}})$$

$$= \log(100) = \log_{10}(10^2) = 2$$