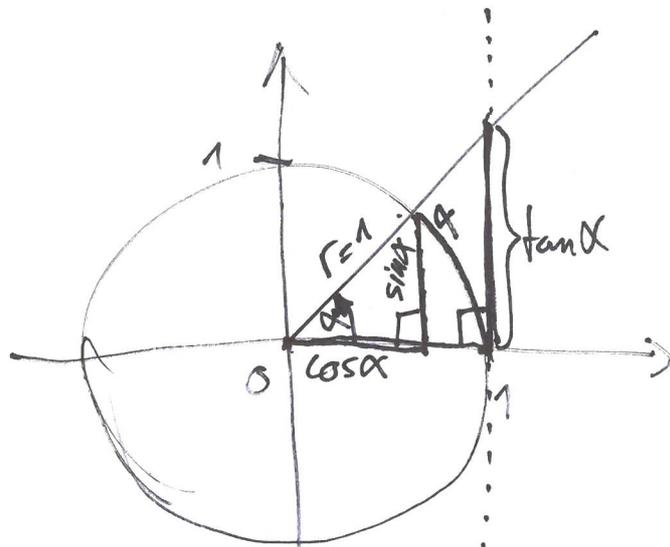


$$3 \times 10^8 \frac{m}{s}$$

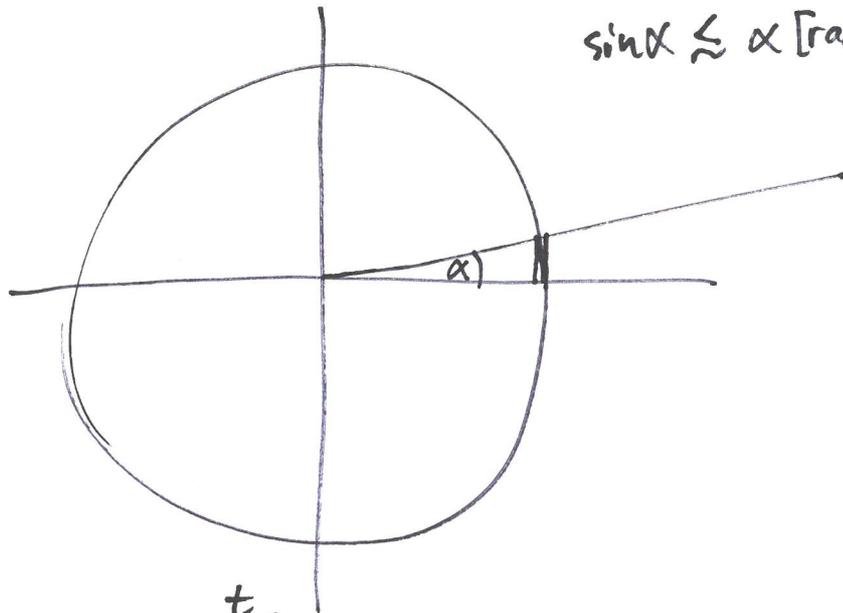
$$3 \times 10^8$$

3E8

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha}$$



$$\text{for } \alpha < 10^\circ \\ \sin \alpha \approx \alpha \text{ [rad]} \approx \tan \alpha$$

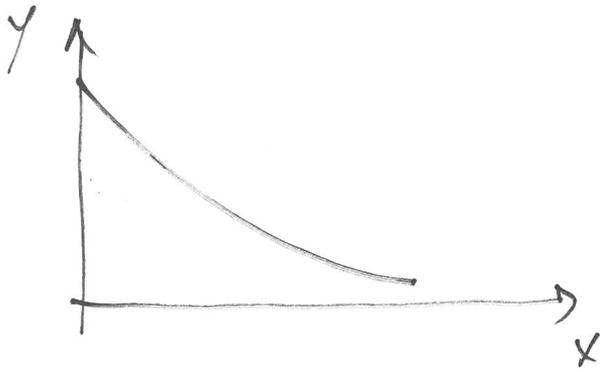


Exp. fu.:

$$\text{aktualis sejt} = 1 \times \underbrace{2 \times 2 \times \dots \times 2}_{n = \frac{t}{20 \text{ min}}} = 1 \times 2^{\frac{t}{20 \text{ min}}}$$

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

# Exp. fu. linearizálása



$$y = y_0 \cdot e^{-px}$$

$$\log(y) = \log(y_0 \cdot e^{-px})$$

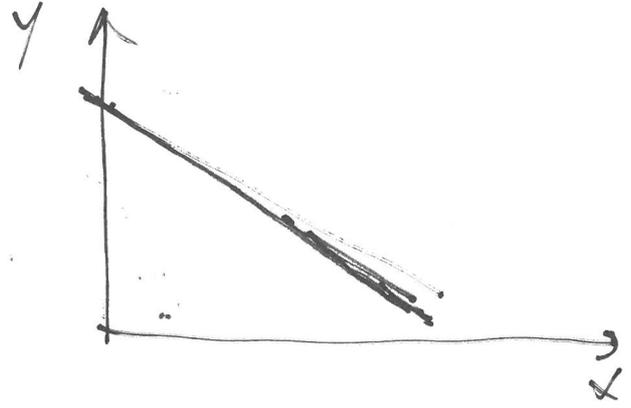
$$\log(y) = \log(y_0) + \log(e^{-px})$$

$$\log(y) = \log(y_0) - p \cdot x \cdot \log(e)$$

$$\log(y) = -p \cdot \log(e) \cdot x + \log(y_0)$$

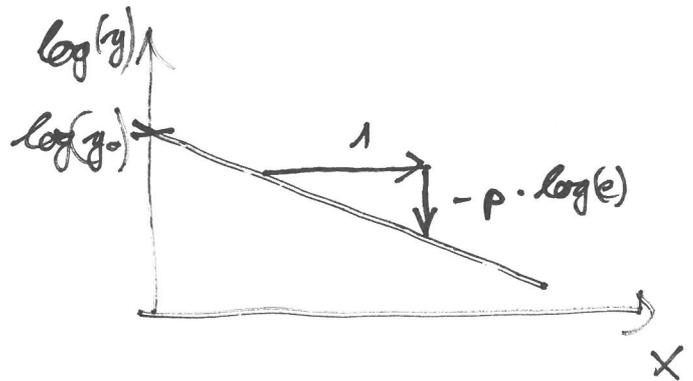
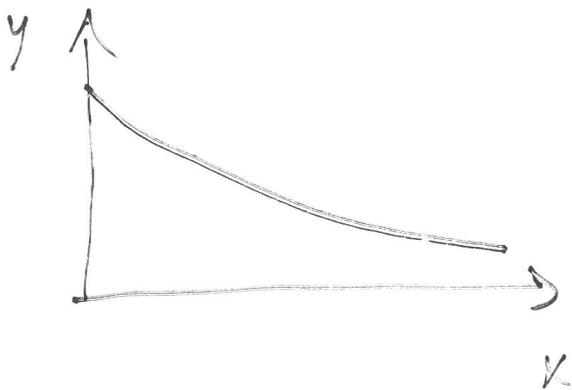
$$y = a \cdot x + b$$

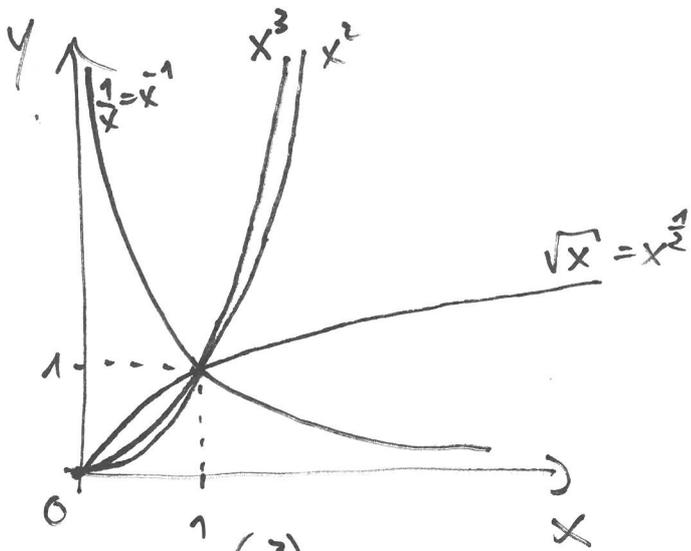
Four vertical double-headed arrows connect the terms in the equation above to the corresponding terms in the equation below:  $\log(y)$  to  $y$ ,  $-p \cdot \log(e)$  to  $a$ ,  $x$  to  $x$ , and  $\log(y_0)$  to  $b$ .



$$\log(ab) = \log(a) + \log(b)$$

$$\log(a^x) = x \cdot \log(a)$$





$$y = b \cdot x^a$$

$$\log(y) = \log(bx^a)$$

$$\log(b) + \log(x^a)$$

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

