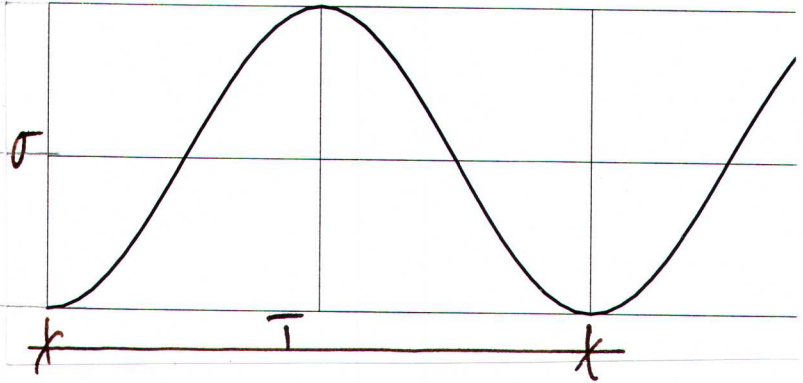
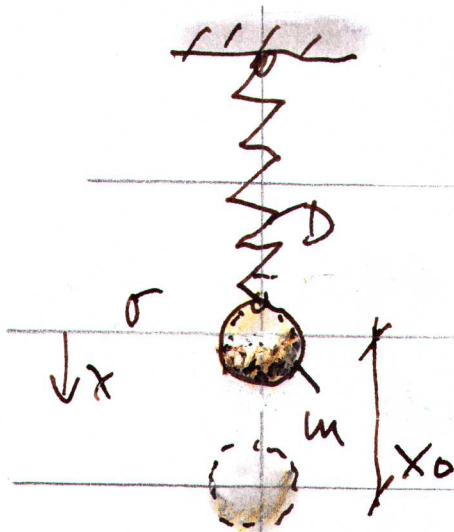


- Freie ungedämpfte Schwingung -



$$m \cdot \ddot{x} + D \cdot \dot{x} = 0$$

$$\dot{x} = j\omega x \quad j = \sqrt{-1}$$

$$\ddot{x} = j^2 \omega^2 x$$

$$-m \cdot x \cdot \omega^2 + D \cdot x = 0$$

$$x = x_0 \cdot \cos(\omega t)$$

$$T = 2\pi \sqrt{\frac{m}{D}}$$

$$\omega_0 = \sqrt{\frac{D}{m}}$$

$$\omega_0 = 2\pi f_0$$

24.05.2019

Irrtum vorbehalten