

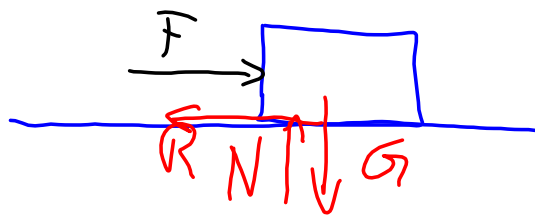
$$\sum F = 0 \quad \text{når } v \text{ er konstant}$$

$$\sum F = m \cdot a$$

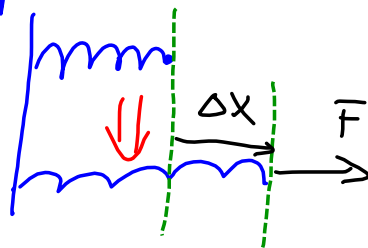
$$F = F$$

Tyngdekraften: $G = mg$

Friksjonskraften: $R = \mu \cdot N$

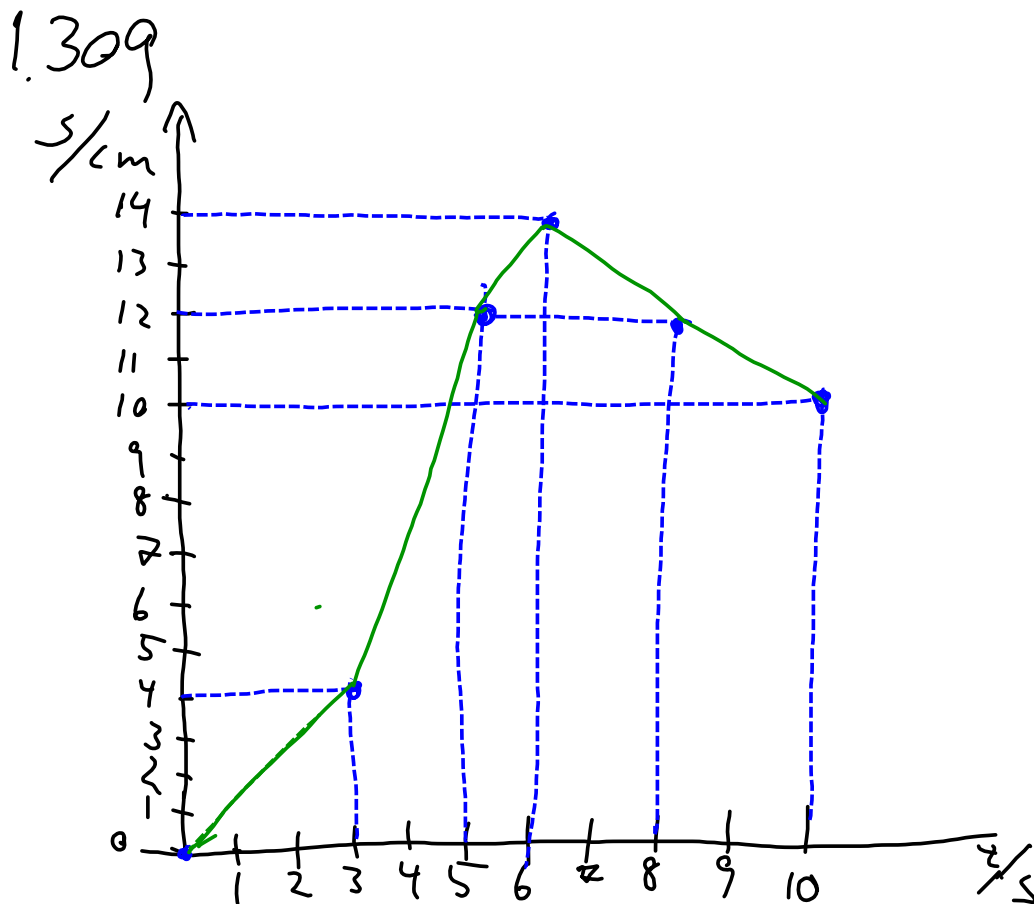


Fjærkraft:



$$F = k \cdot \Delta x$$

Hooke's law



b) $(0-3, 0)$ [s]: $\Delta s = s_3 - s_0 = 4,0 - 0,0 = 4,0$ [cm]

$(3,0-5,0)$ [s]: $\Delta s = s_5 - s_3 = 12,0 - 4,0 = 8,0$ [cm]

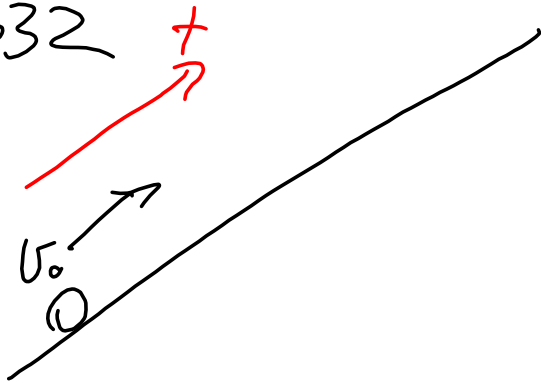
$(5,0-8,0)$ [s]: $\Delta s = s_8 - s_5 = 12,0 - 12,0 = 0,0$ [cm]

$(8,0-10,0)$ [s]: $\Delta s = s_{10} - s_8 = 10,0 - 12,0 = -2,0$ [cm]

c)

$$4,0 + 8,0 + 2,0 + 2,0 + 2,0 = 18,0 \text{ [cm]}$$

1.332



$$v_0 = 5,0 \text{ m/s}$$

$$a = -2,0 \text{ m/s}^2$$

$$b) v = v_0 + a \cdot t = 5,0 \left[\frac{\text{m}}{\text{s}} \right] + (-2,0) \cdot 1,0 \left[\frac{\text{m}}{\text{s}^2} \cdot \text{s} \right]$$

$$= 3,0 \left[\frac{\text{m}}{\text{s}} \right]$$

$$c) v = v_0 + at$$

$$\uparrow$$

$$0,0 \quad a \cdot t = -v_0$$

$$t = \frac{-v_0}{a} = \frac{-5,0 \left[\frac{\text{m}}{\text{s}} \right]}{-2,0 \left[\frac{\text{m}}{\text{s}^2} \right]} = 2,5 \left[\text{s} \right]$$

$$d) s = \frac{v_0 + v}{2} \cdot t = \frac{(5,0 - 0,0)}{2} \cdot 2,5 = 6,3 \left[\text{m} \right]$$