

$$F = 1500 \text{ N}$$

$$s = 800 \text{ m}$$

$$A = F \cdot s$$

$$A = 1500 \text{ N} \cdot 800 \text{ m}$$

$$A = 1200000 \text{ Nm}$$

$$A = 1,2 \text{ MJ}$$

$$v_2 = 10 \frac{\text{m}}{\text{s}}$$

$$v_k = 40 \frac{\text{m}}{\text{s}}$$

$$t = 5 \text{ s}$$

$$\Delta v = v_k - v_2$$

$$\Delta v = 40 \frac{\text{m}}{\text{s}} - 10 \frac{\text{m}}{\text{s}}$$

$$\Delta v = 30 \frac{\text{m}}{\text{s}}$$

$$a = \frac{\Delta v}{t}$$

$$a = \frac{30 \frac{\text{m}}{\text{s}}}{5 \text{ s}}$$

$$a = 3,3 \frac{\text{m}}{\text{s}^2}$$

$$g = 9,81 \frac{\text{m}}{\text{s}^2}$$

$$t = 3,4 \text{ s}$$

$$s = h = \frac{g \cdot t^2}{2}$$

$$h = \frac{9,81 \frac{\text{m}}{\text{s}^2} \cdot 3,4^2 \text{ s}^2}{2}$$

$$h = \frac{9,81 \cdot 11,56 \text{ m}}{2}$$

$$h = 56,7 \text{ m}$$

$$t(46,7) = \sqrt{\frac{2 \cdot 46,7 \text{ m}}{9,81 \frac{\text{m}}{\text{s}^2}}}$$

$$t(46,7) = 3,09 \text{ s}$$

Za zadnjih 40 m porabi 0,31 s

$$v_2 = 50 \frac{\text{km}}{\text{h}} = 25 \frac{\text{m}}{\text{s}}$$

$$v_k = 50 \frac{\text{km}}{\text{h}} = 13,9 \frac{\text{m}}{\text{s}}$$

$$a = -3,5 \frac{\text{m}}{\text{s}^2}$$

$$t = \frac{\Delta v}{a}$$

$$t = \frac{13,9 \frac{\text{m}}{\text{s}} - 25 \frac{\text{m}}{\text{s}}}{-3,5 \frac{\text{m}}{\text{s}^2}}$$

$$t = 3,171 \text{ s}$$

$$s = v \cdot t$$

$$s = 13,9 \frac{\text{m}}{\text{s}} \cdot 3,171 \text{ s}$$

$$s = 44,1 \text{ m}$$

$$\bar{v} = \frac{v_2 + v_k}{2} = \frac{25 \frac{\text{m}}{\text{s}} + 13,9 \frac{\text{m}}{\text{s}}}{2} = 19,45 \frac{\text{m}}{\text{s}}$$

$$s = \bar{v} \cdot t$$

$$s = 19,45 \frac{\text{m}}{\text{s}} \cdot 3,171 \text{ s}$$

$$s = 61,7 \text{ m}$$

Erlik: 7:00

$$s = 32 \text{ km}$$

$$\bar{v} = 45 \frac{\text{km}}{\text{h}}$$

$$t_s = 2,6 \text{ min}$$

$$t = \frac{s}{\bar{v}}$$

$$t = \frac{32 \text{ km}}{45 \frac{\text{km}}{\text{h}}}$$

$$t = 0,71 \text{ h} = 42,6 \text{ min}$$

$$t_{\text{sk}} = 42,6 \text{ min} + 12 \text{ min} = 54,6 \text{ min}$$

V Lj ob 7:54,6

Mik: 7:10

$$s = 36 \text{ km}$$

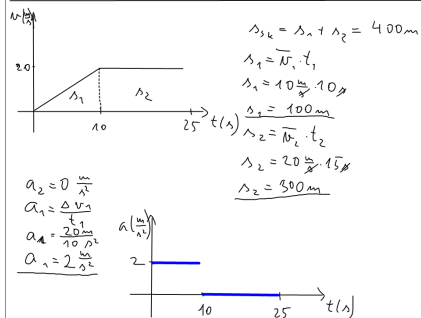
$$\bar{v} = 95 \frac{\text{km}}{\text{h}}$$

$$t = \frac{s}{\bar{v}}$$

$$t = \frac{36 \text{ km}}{95 \frac{\text{km}}{\text{h}}}$$

$$t = 0,378 \text{ h} = 22,7 \text{ min}$$

V Lj ob 7:32,7



$$m = 800 \text{ kg}$$

$$v = 30 \frac{\text{km}}{\text{h}} = 8,3 \frac{\text{m}}{\text{s}}$$

$$W_k = \frac{m \cdot v^2}{2}$$

$$W_k = \frac{800 \text{ kg} \cdot 8,3^2 \text{ m}^2/\text{s}^2}{2}$$

$$W_k = 27556 \text{ J}$$