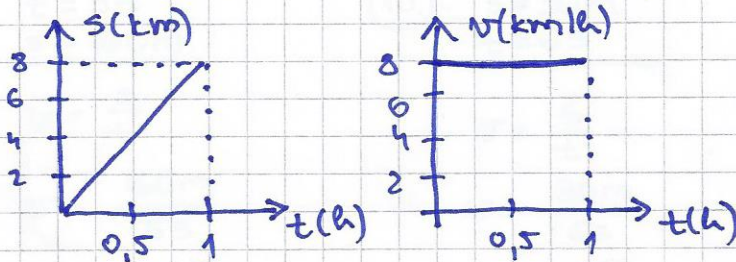


Rješenja:

1. (a) 1080 km/h (b) 5 m/s

2. $v = 8 \text{ km/h} \rightarrow$ u 1h prijeđe 8km.

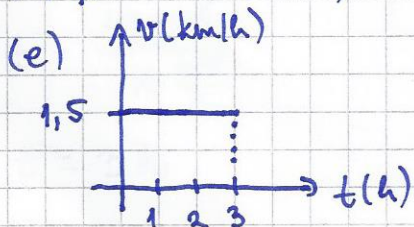


3. $t = 3 \text{ h}$ 4. $v = 6 \text{ cm/min} = 0,1 \text{ cm/s} = 0,001 \text{ m/s}$

5. $s = 1700 \text{ m}$ 6. $v = 5 \frac{\text{m}}{\text{s}}$

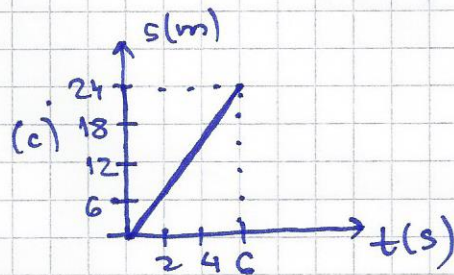
7. $s_1 = 50 \text{ km}$, $s_2 = 120 \text{ km} \Rightarrow s_{\text{uk}} = 170 \text{ km}$, $\bar{v} = 85 \frac{\text{km}}{\text{h}}$

8. (a) jednoliko (b) $s = 4,5 \text{ km}$ (c) $t = 3 \text{ h}$ (d) $v = 1,5 \text{ km/h}$



9. (a) jednoliko

(b) $s = v \cdot t = 24 \text{ m}$

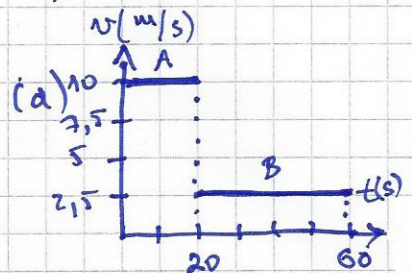


10. (a) A - jednoliko, B - jednoliko

(b) $v_A = \frac{200 \text{ m}}{20 \text{ s}} = 10 \frac{\text{m}}{\text{s}}$ $v_B = \frac{100 \text{ m}}{40 \text{ s}} = 2,5 \frac{\text{m}}{\text{s}}$

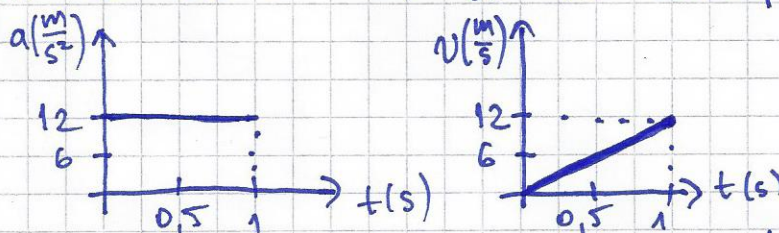
(c) $s_{\text{uk}} = 300 \text{ m}$

(e) $\bar{v} = 5 \text{ m/s}$



11. $v = 6 \text{ m/s}$ 12. $t = 5 \text{ s}$ 13. $a = 3,75 \frac{\text{m}}{\text{s}^2}$

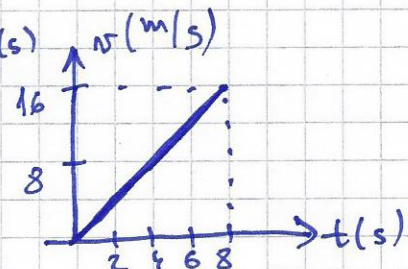
14. $a = 12 \text{ m/s}^2 \Rightarrow$ u 1s brz. poraste za 12 m/s .



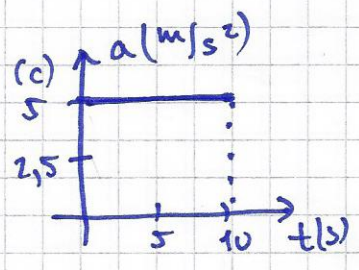
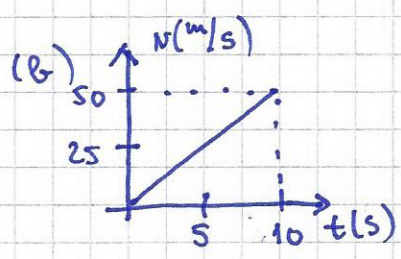
15. (a) jednoliko ubrzano

(b) $v = 16 \text{ m/s}$

(c)

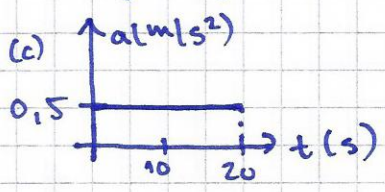


16. (a) $a = 5 \text{ m/s}^2$



17. (a) jednoliko ubrzano

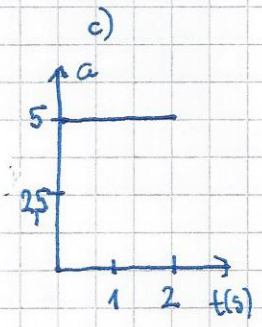
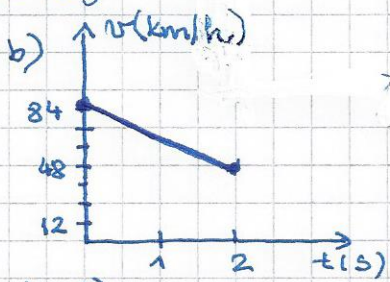
(b) $a = 0,5 \text{ m/s}^2$



18. $v_{\text{poč}} = 48 \text{ km/h}$
 $v_{\text{kon}} = 84 \text{ km/h}$
 $\Delta t = 2 \text{ s}$

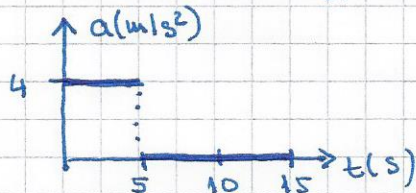
$\Delta v = 84 - 48 = 36 \frac{\text{km}}{\text{h}} = 10 \frac{\text{m}}{\text{s}}$

a) $a = \frac{\Delta v}{\Delta t} = \frac{10 \text{ m/s}}{2 \text{ s}} = 5 \frac{\text{m}}{\text{s}^2}$



19. a) A - jednoliko ubrzano
 B - jednoliko

b) $a_A = 4 \frac{\text{m}}{\text{s}^2}$, $a_B = 0 \frac{\text{m}}{\text{s}^2}$

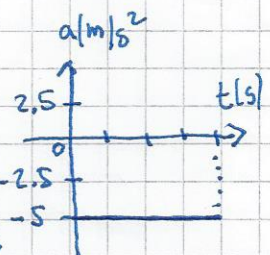
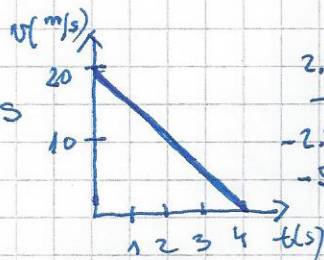


20. $v_p = 72 \frac{\text{km}}{\text{h}} = 20 \frac{\text{m}}{\text{s}}$
 $a = -5 \text{ m/s}^2$

$\Delta t = \frac{\Delta v}{a} = \frac{-20 \text{ m/s}}{-5 \text{ m/s}^2} = 4 \text{ s}$

jednoliko usporena

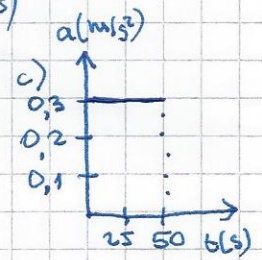
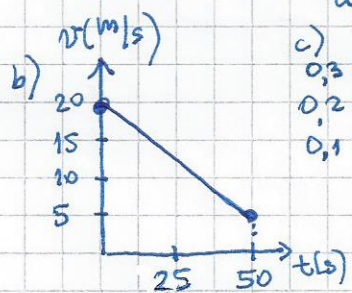
$\Delta v = v_k - v_p = 0 - 20 = -20 \text{ m/s}$



21. $v_{\text{poč}} = 72 \frac{\text{km}}{\text{h}} = 20 \frac{\text{m}}{\text{s}}$
 $v_{\text{kon}} = 18 \frac{\text{km}}{\text{h}} = 5 \frac{\text{m}}{\text{s}}$

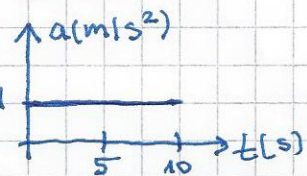
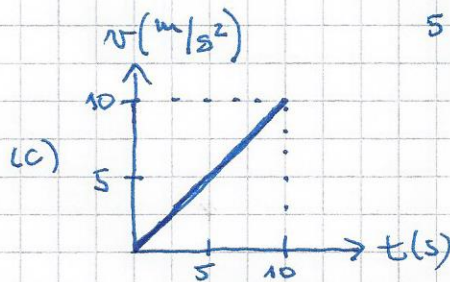
$\Delta v = 5 \frac{\text{m}}{\text{s}} - 20 \frac{\text{m}}{\text{s}} = -15 \frac{\text{m}}{\text{s}}$

a) $a = \frac{\Delta v}{\Delta t} = 0,3 \text{ m/s}^2$



22. a) $a = \frac{F}{m} = 1 \frac{\text{m}}{\text{s}^2}$

b) $v = a \cdot t = 10 \frac{\text{m}}{\text{s}}$

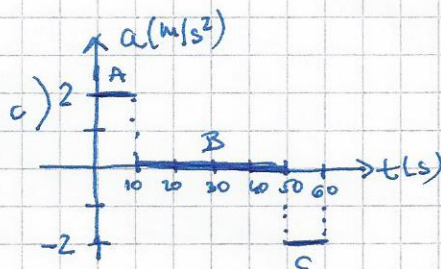


23. $m = 166,6 \text{ kg}$

24. $F = 0,5 \text{ N}$

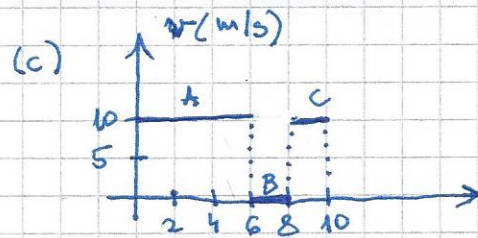
25. a) A - jednoliko ubrz.
 B - jednoliko
 C - jednoliko usporeno

b) $a_A = 2 \frac{\text{m}}{\text{s}^2}$
 $a_B = 0 \text{ m/s}^2$
 $a_C = -2 \text{ m/s}^2$



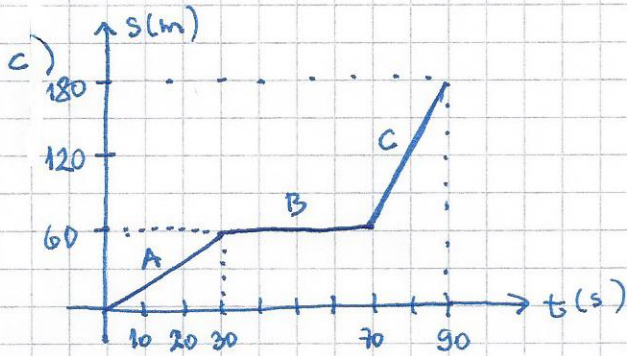
26. (a) A - jednoliko
B - miruje
C - jednoliko

(b) $v_A = 10 \text{ m/s}$
 $v_B = 0 \text{ m/s}$
 $v_C = 10 \text{ m/s}$



27. a) A - jednoliko
B - miruje
C - jednoliko

b) $s_A = 60 \text{ m}$
 $s_B = 0 \text{ m}$
 $s_C = 120 \text{ m}$ } $s_{uk} = 180 \text{ m}$



d) $\bar{v} = \frac{s_{uk}}{t_{uk}} = 2 \text{ m/s}$