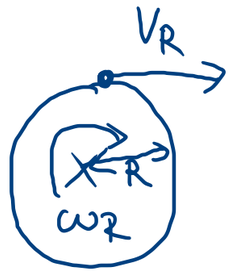


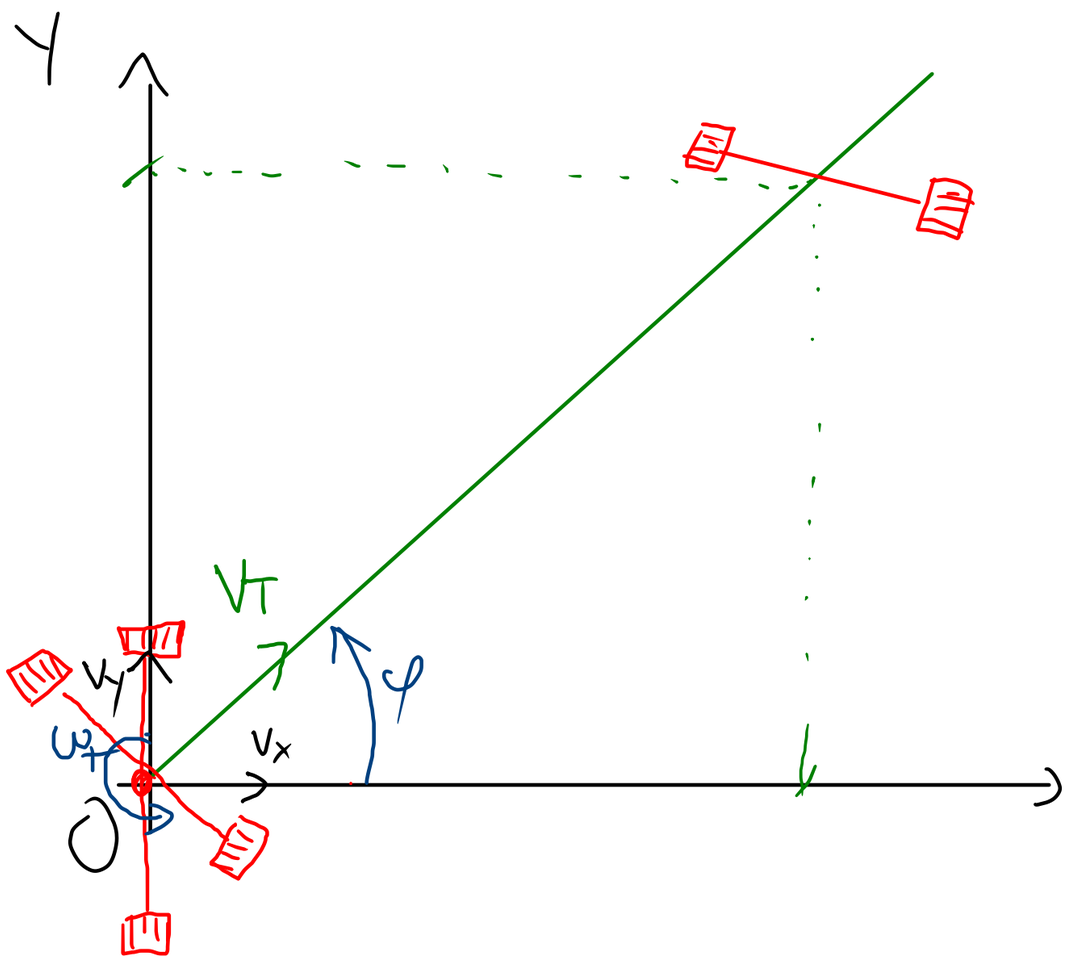
$$V_R = \omega_R \cdot R$$

$$R = \frac{L}{2} \cdot \frac{V_R + V_L}{V_R - V_L}$$

$$V_T = \frac{V_R + V_L}{2}$$

$$\omega_T = \frac{V_R - V_L}{L}$$

okamžitý stred otáčania



$$V_x = V_T \cdot \cos\varphi$$

$$V_y = V_T \cdot \sin\varphi$$

$$\Delta x_T = V_x \cdot \Delta t$$

$$\Delta y_T = V_y \cdot \Delta t$$

$$\begin{bmatrix} x_T \\ y_T \end{bmatrix} = \begin{matrix} x_T + \Delta x_T \\ y_T + \Delta y_T \end{matrix} \Big\} \text{ poloha}$$

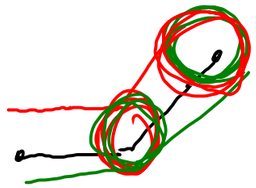
$$\Delta\varphi = \omega_T \cdot \Delta t$$

$$\varphi = \varphi + \Delta\varphi \rightarrow \text{orientácia}$$

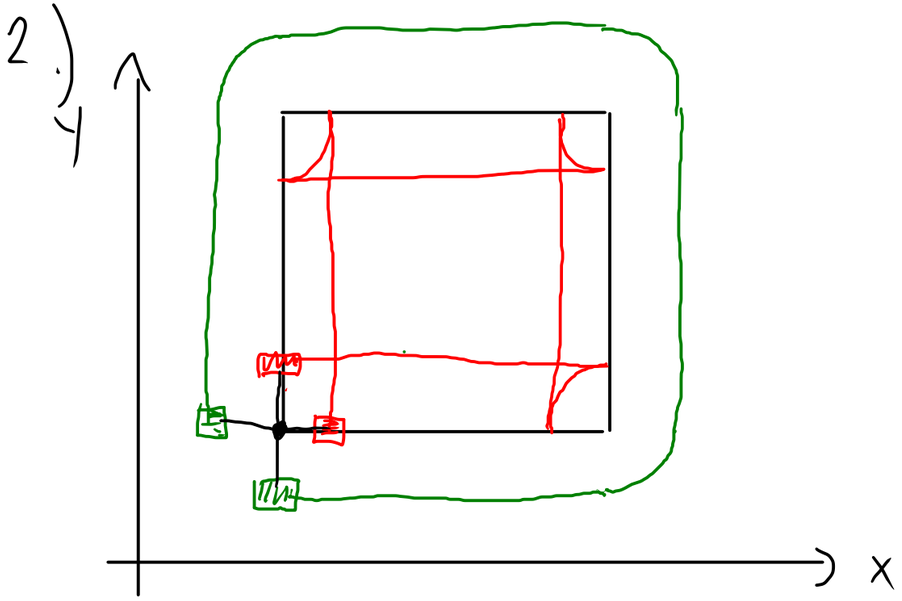
1.) $t = [0 \quad 5 \quad 10 \quad 15 \quad 20]$

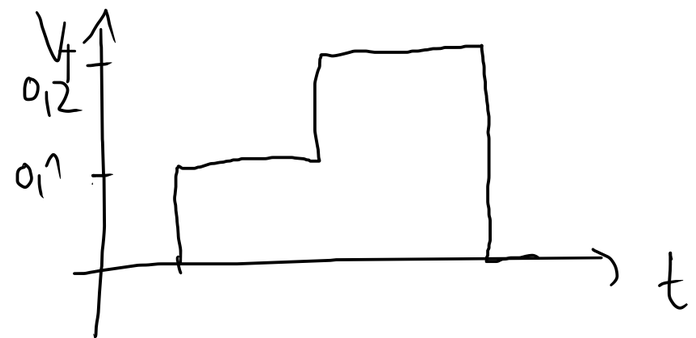
$V_L = [0 \quad 2 \quad -1 \quad 1 \quad 2]$

$V_R = [0 \quad 2 \quad 1 \quad 1 \quad -2]$

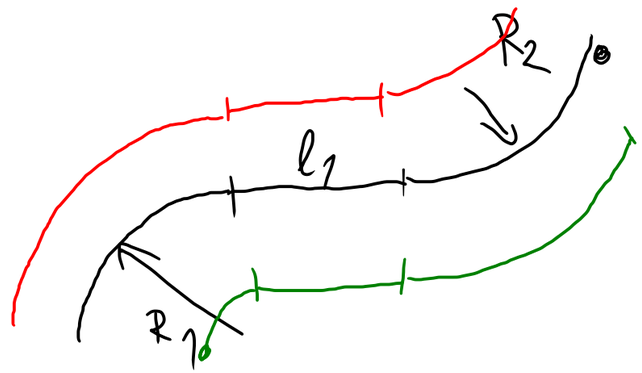


2.)

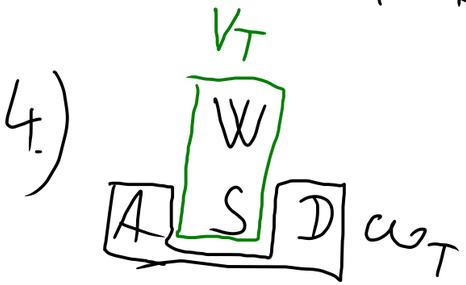




3.)



4.)



W → W →

0,1 m/s → 0,2 m/s

A → A →

−0,1 rad/s → 0,2 rad/s

R : $\omega_T = 0$

Q : $V_T = 0$

Space : $\omega_T = V_T = 0$

*.csv / *.txt

t	V_T	ω_T	x_T	y_T	φ
0	0	0	0	0	0
0,1	0,1	0	0,01	0	0
0,2	0,1	0	0,02	0	0
0,3	0,1	0	⋮	0	0
⋮					