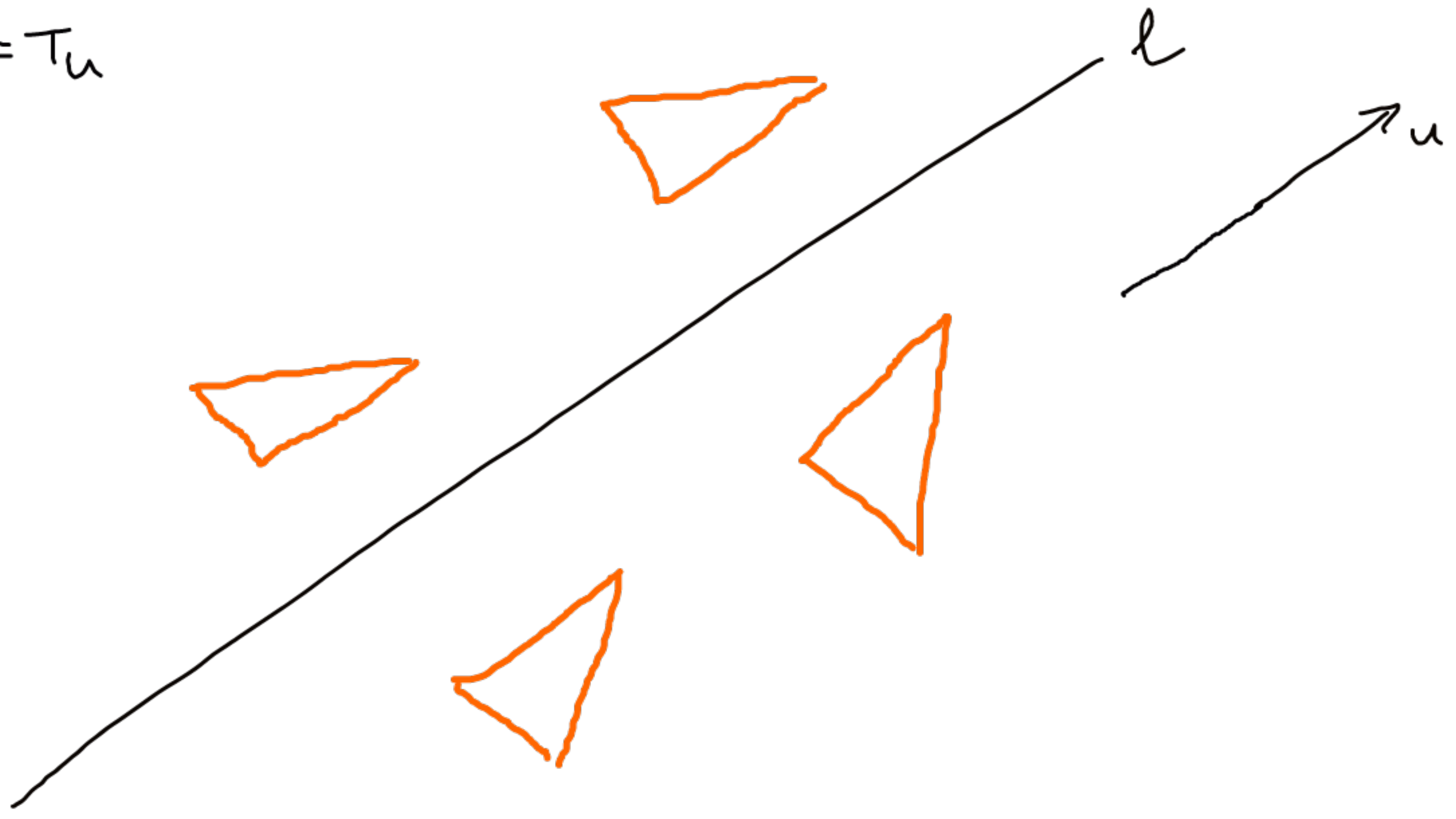


$\frac{1}{3} R_e T_u R_l = T_u$
 $u \parallel l$

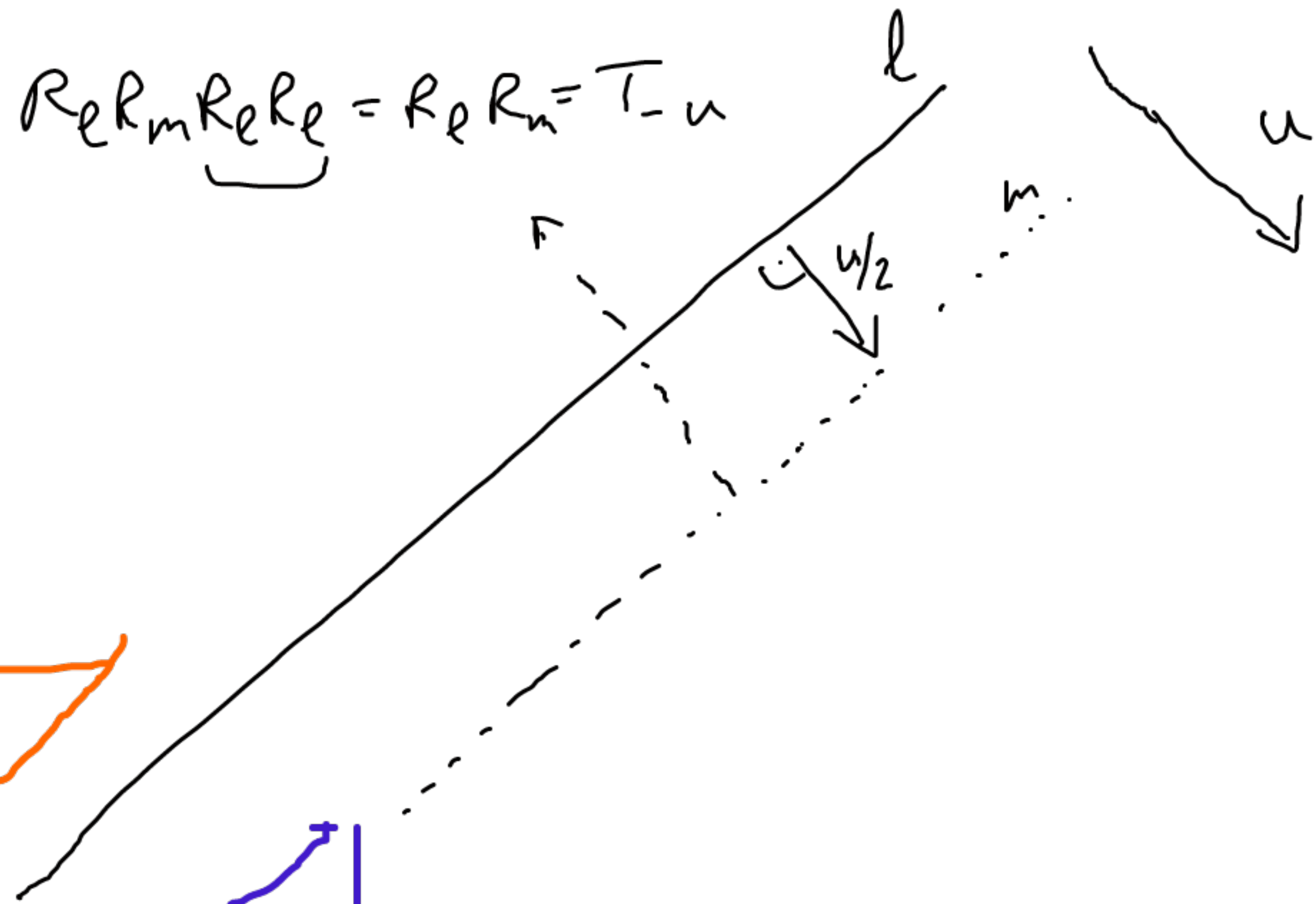
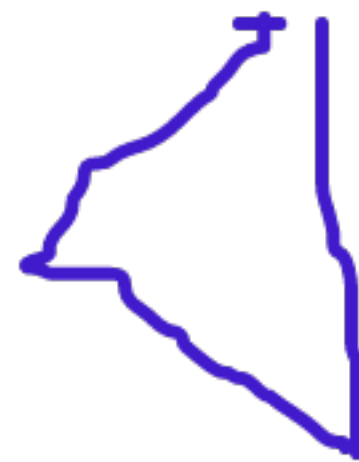
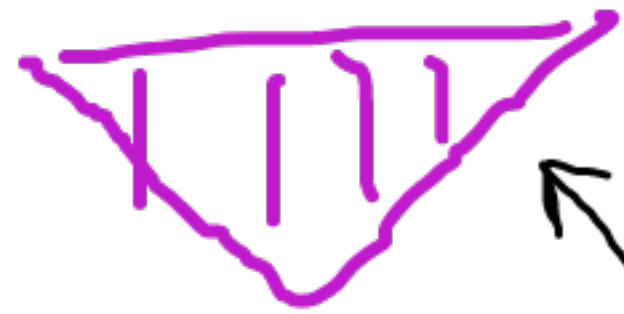


$R_e T_u R_l = \underbrace{R_e R_l}_{G_u} T_u = T_u$

v1/9

u ⊥ l

$$Re T_u Re = Re R_m Re Re = Re R_m = T_u$$



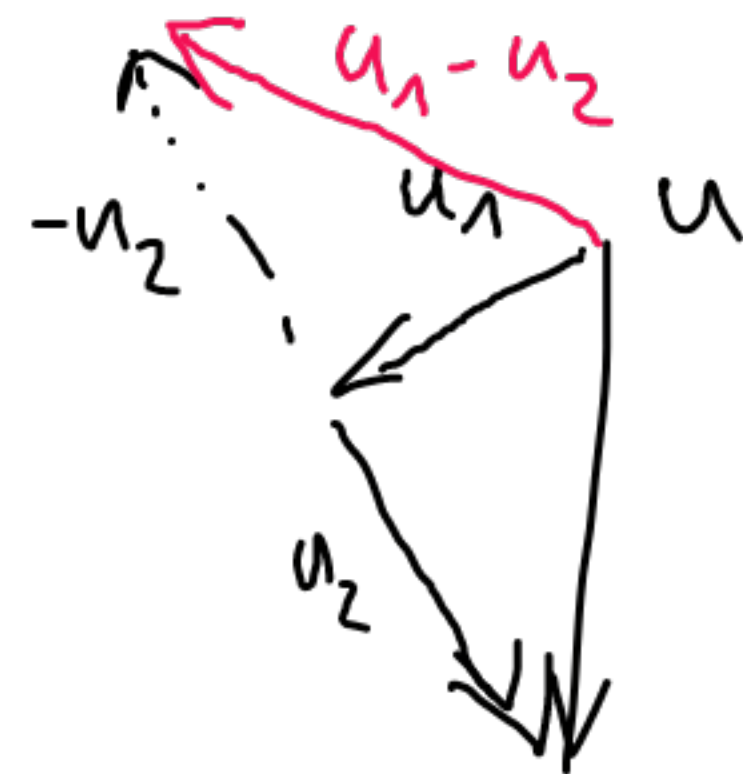
$$T_u = R_m Re$$

V1/9 ogólny przypadek: $u = u_1 + u_2$, $u_1 \parallel l$, $u_2 \perp l$

$$\underline{R_l T_u R_l} = R_l \underbrace{T_{u_1} T_{u_2}}_{G_{u_1}} R_l =$$

$$= T_{u_1} \underbrace{R_l T_{u_2} R_l}_{T_{u_2}} = T_{u_1} T_{-u_2} = T_{u_1 - u_2}$$

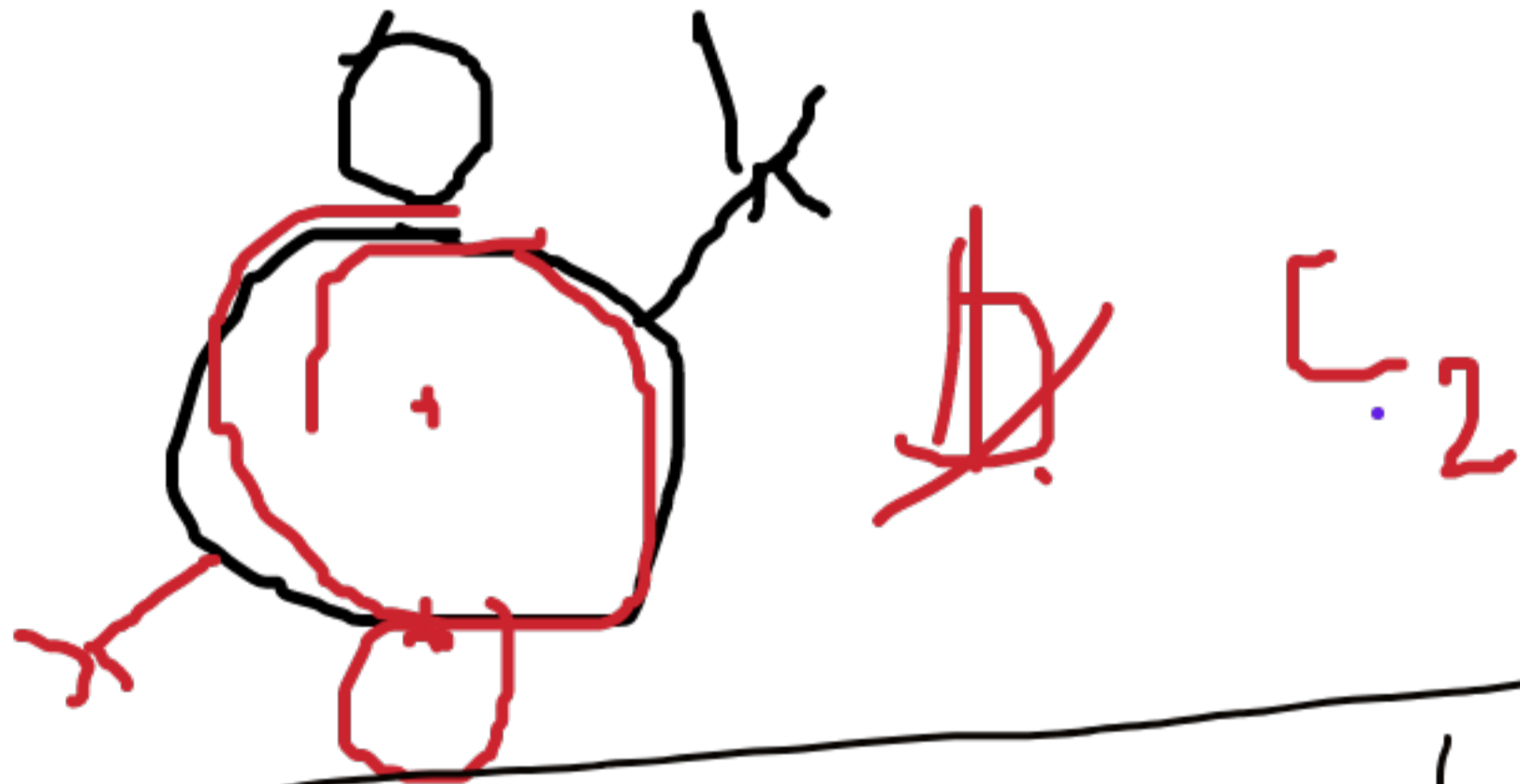
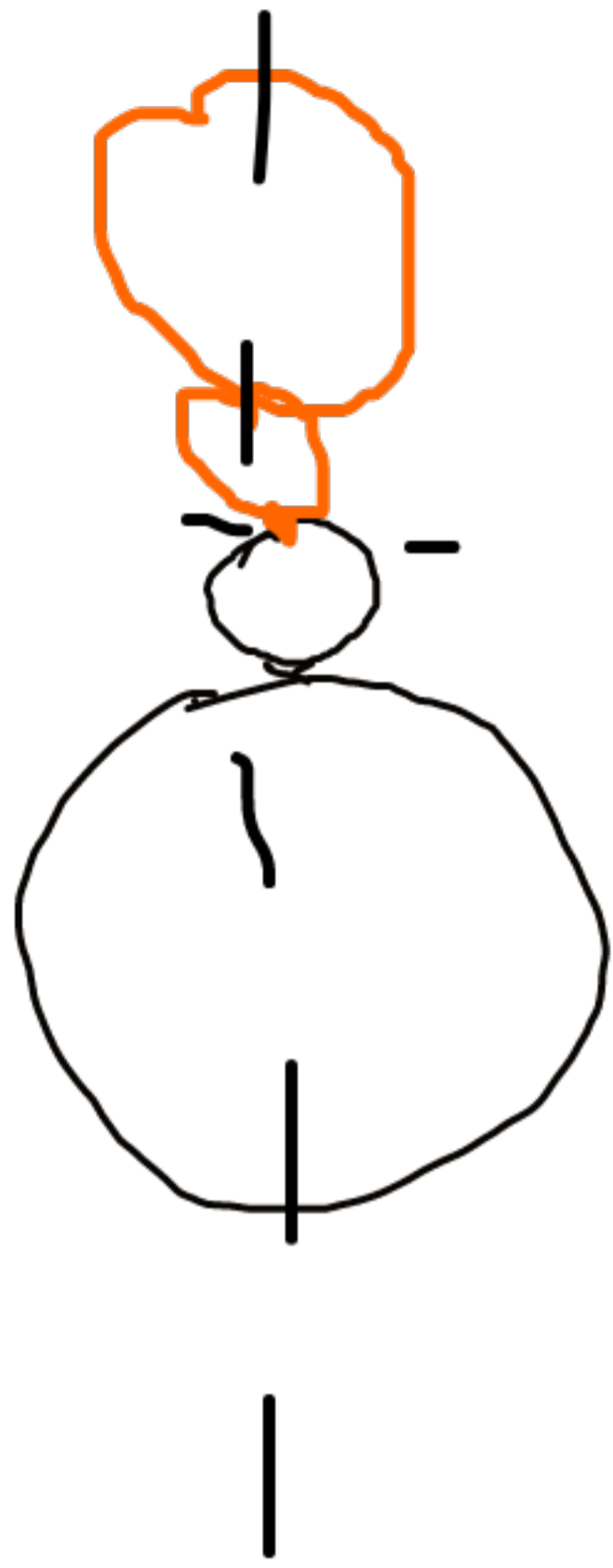
z poprzedniego przypadku ($u_2 \perp l$)



VII)



D_2



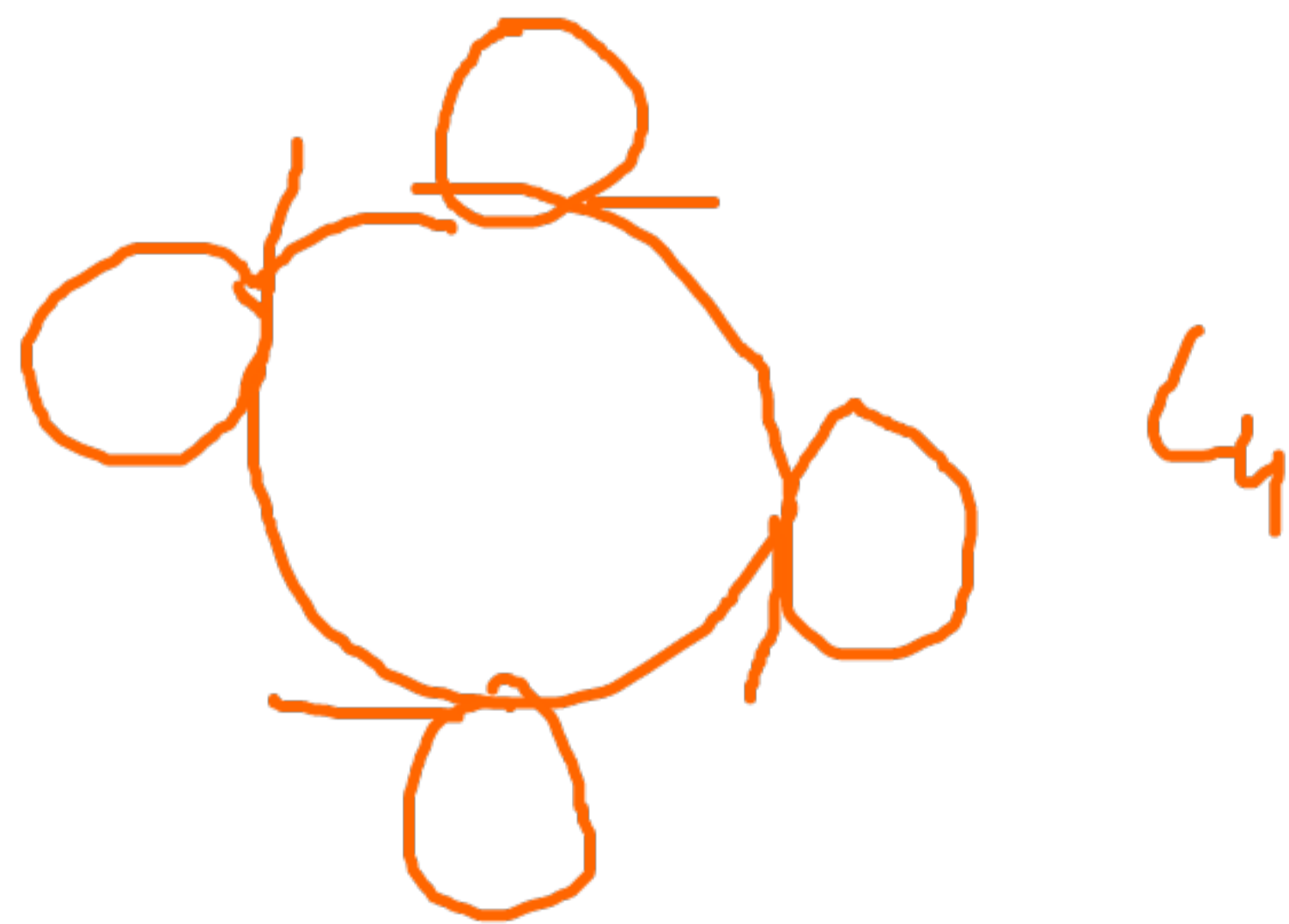
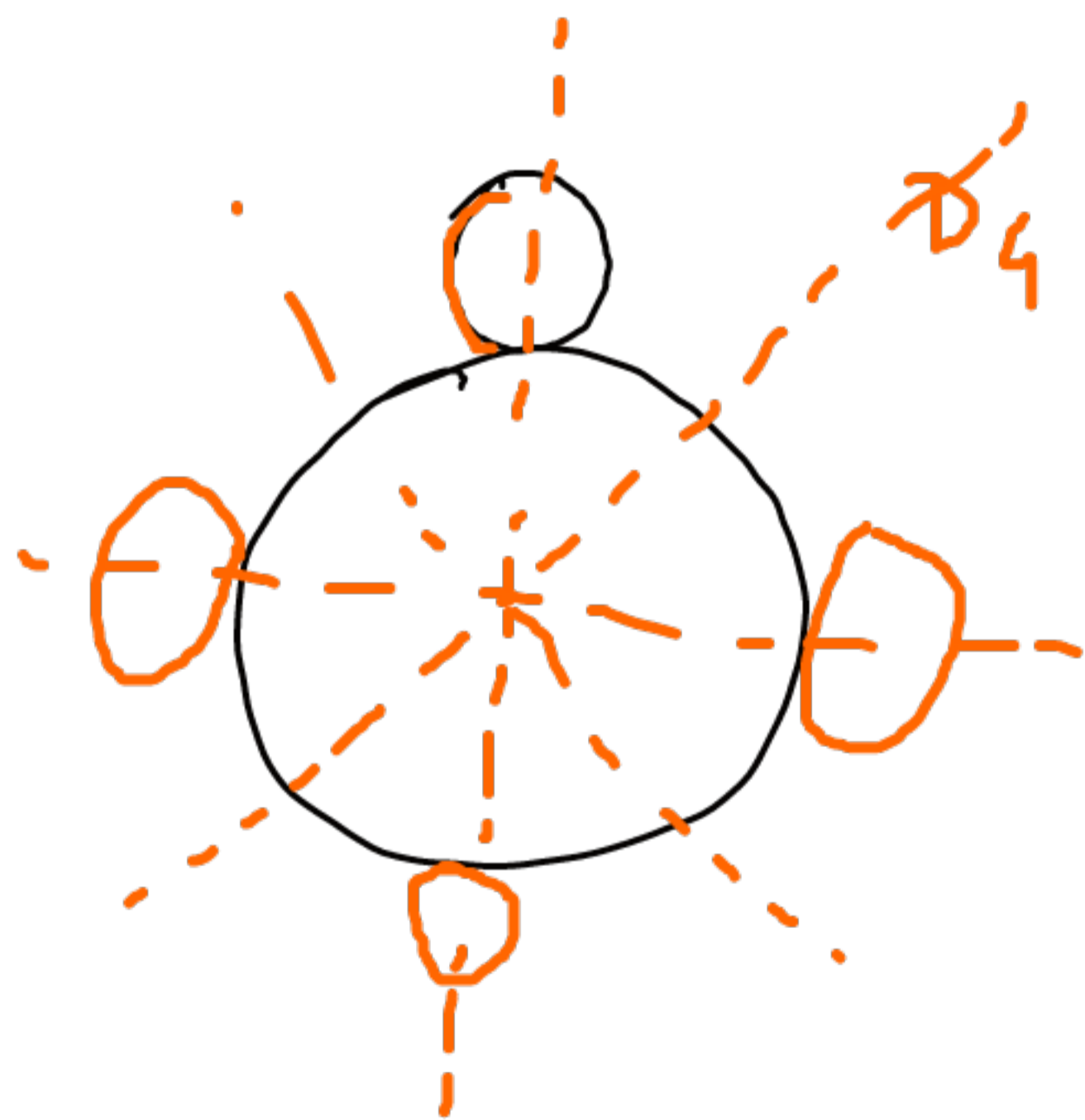
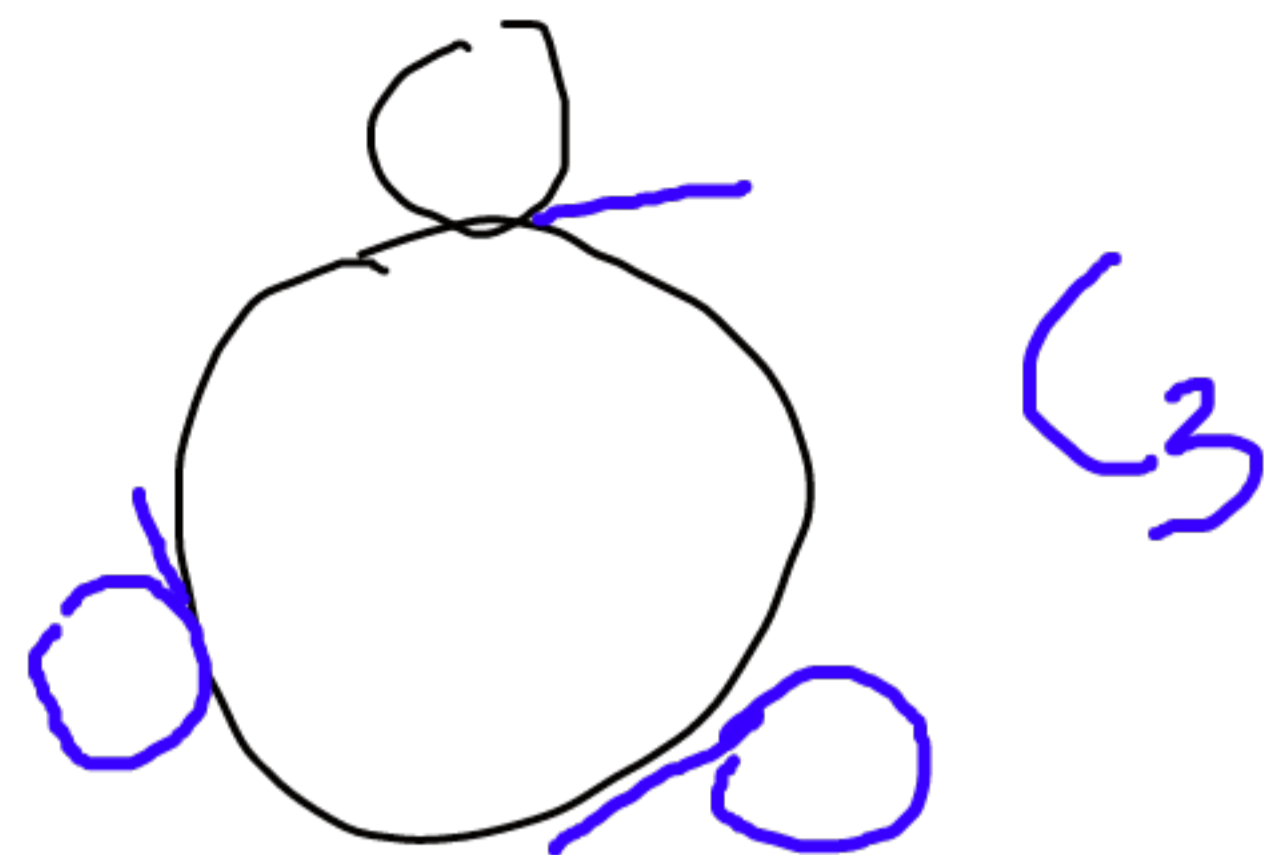
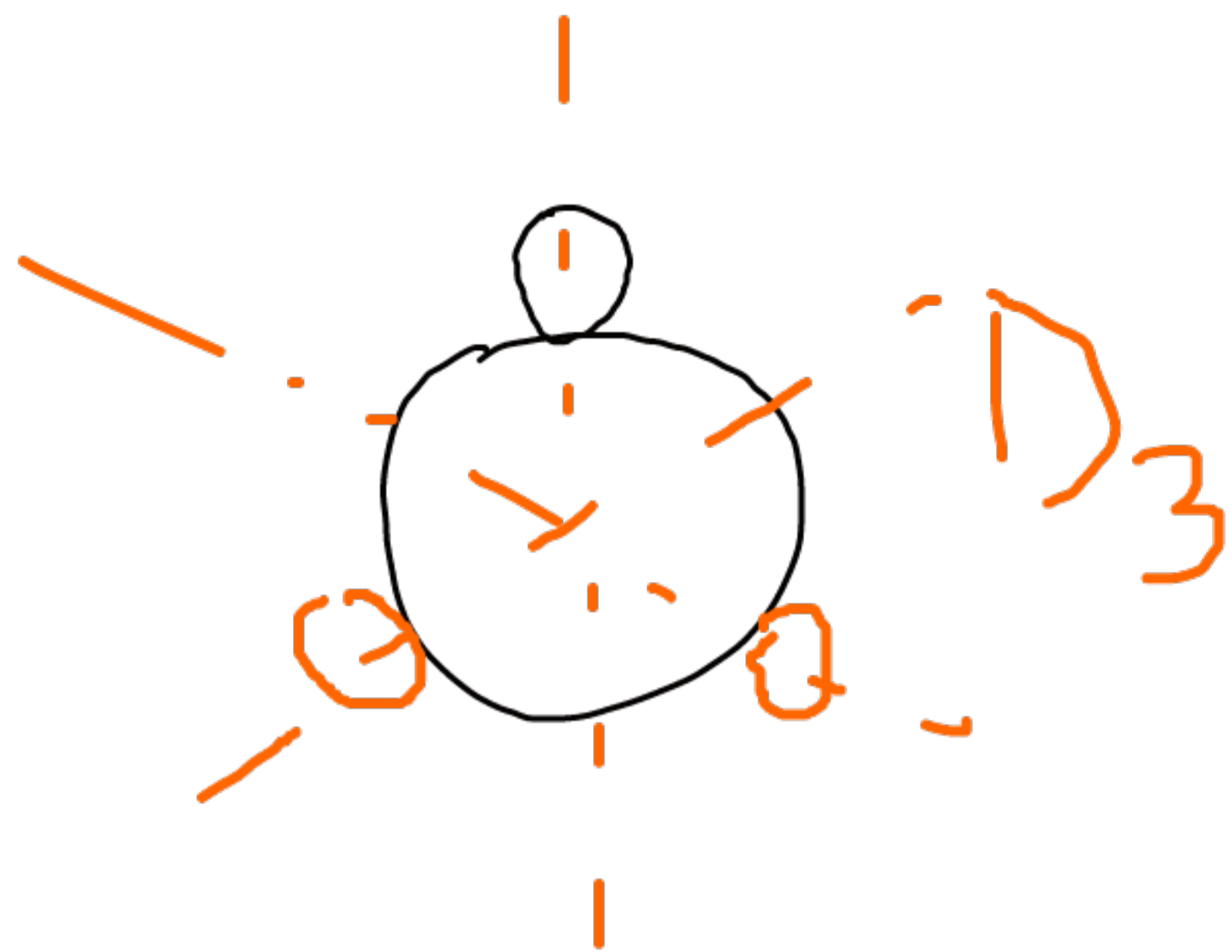
D_1



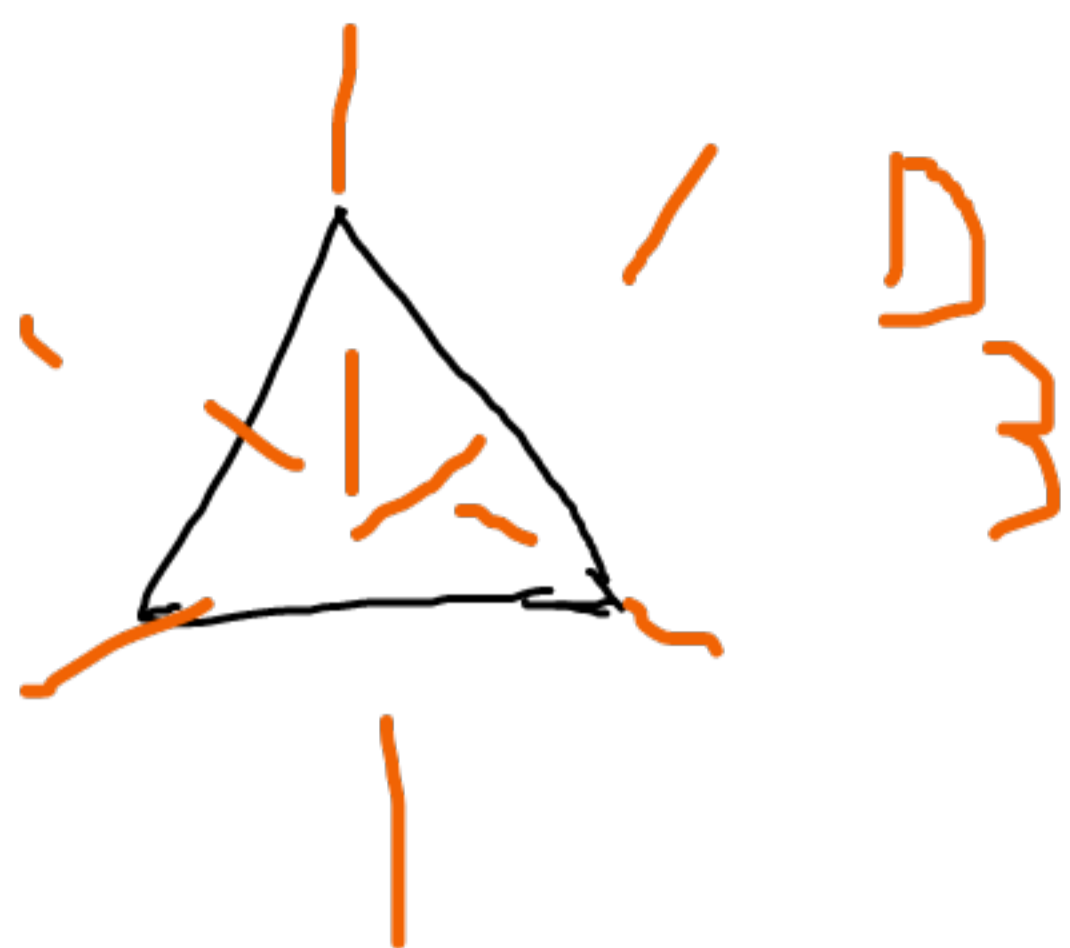
C_1



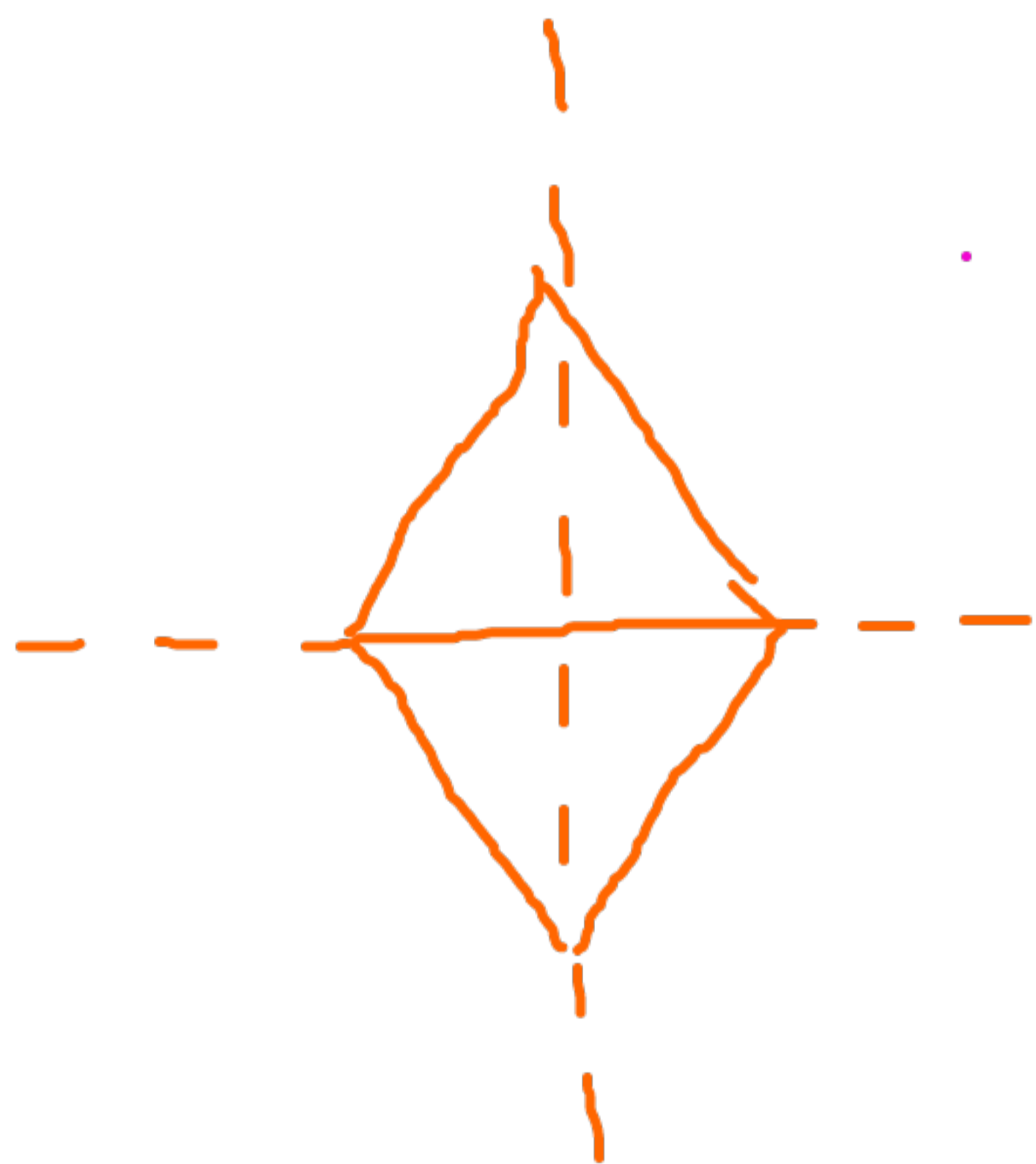
VII-4



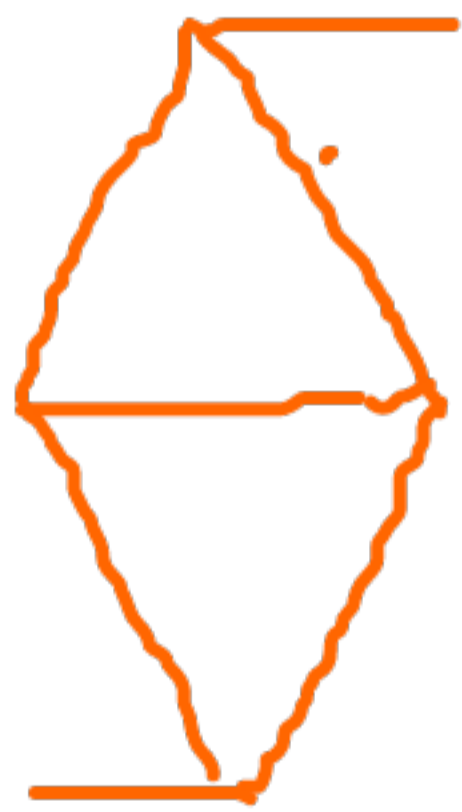
VII-5



D_3



D_2



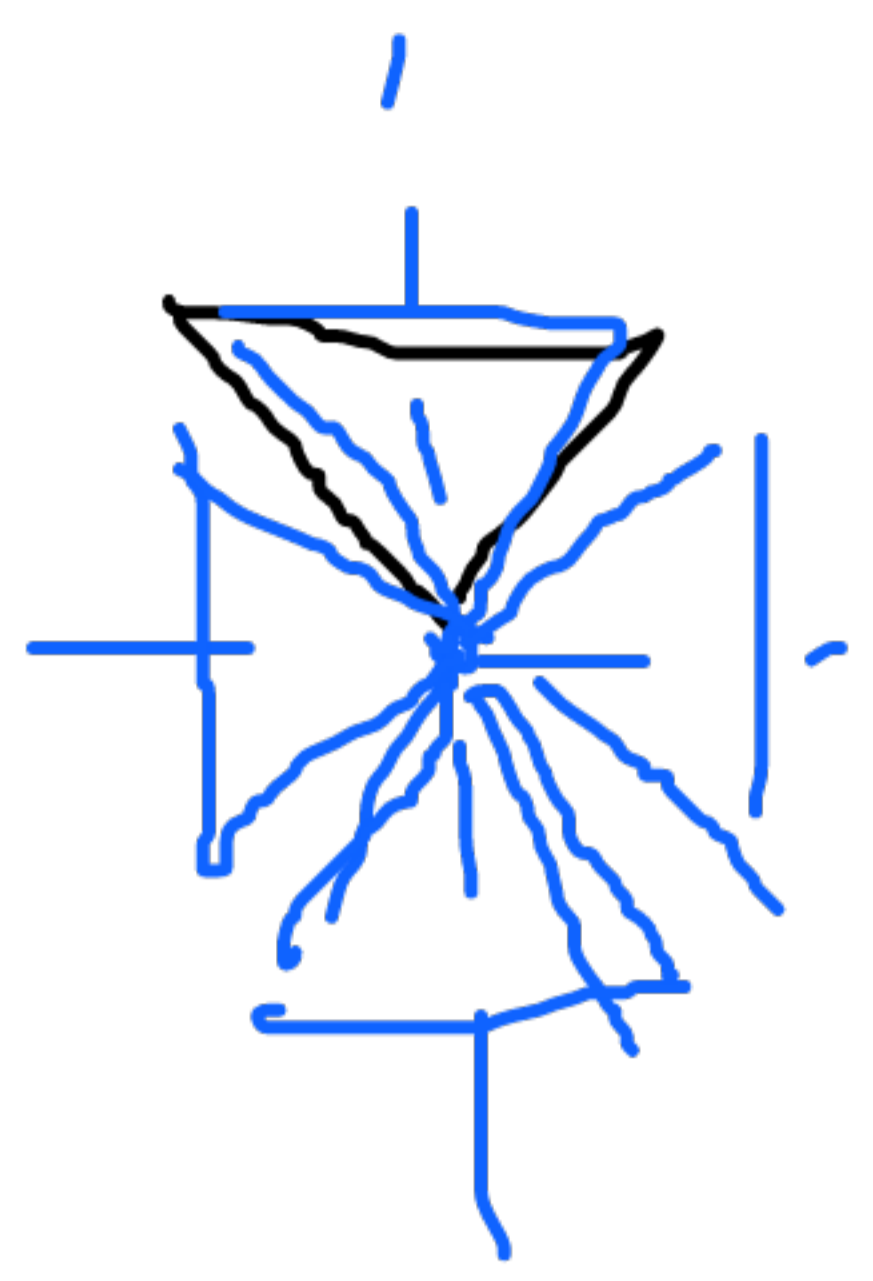
C_2



C_2

VII-4

D_4



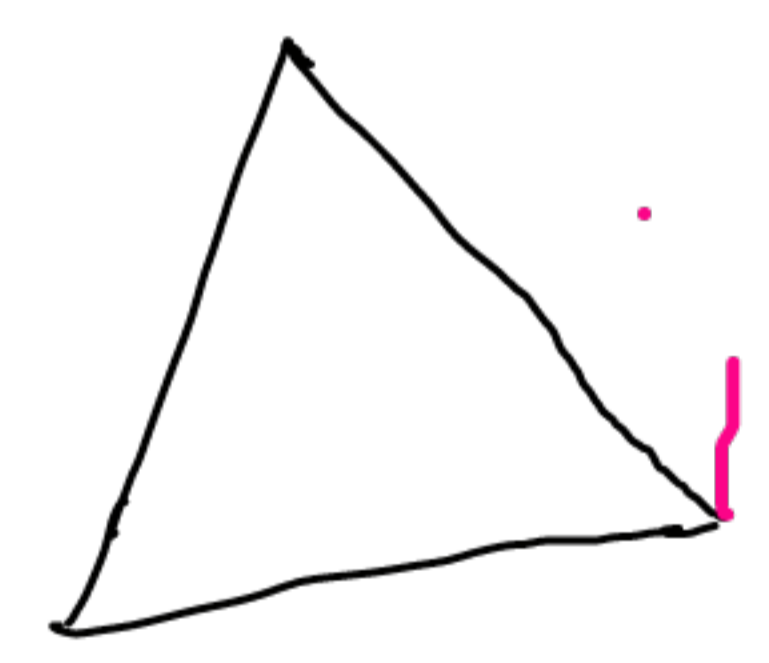
C_4



D_3

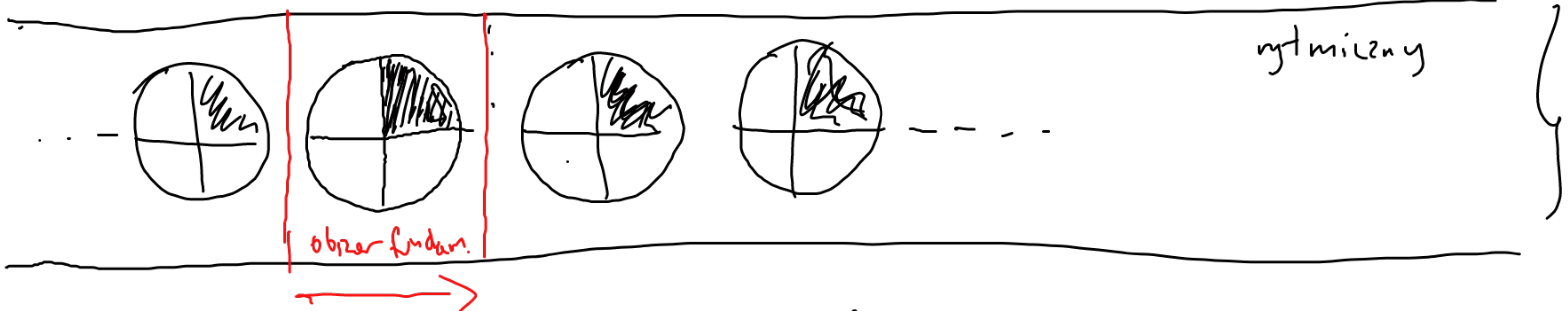


C_3

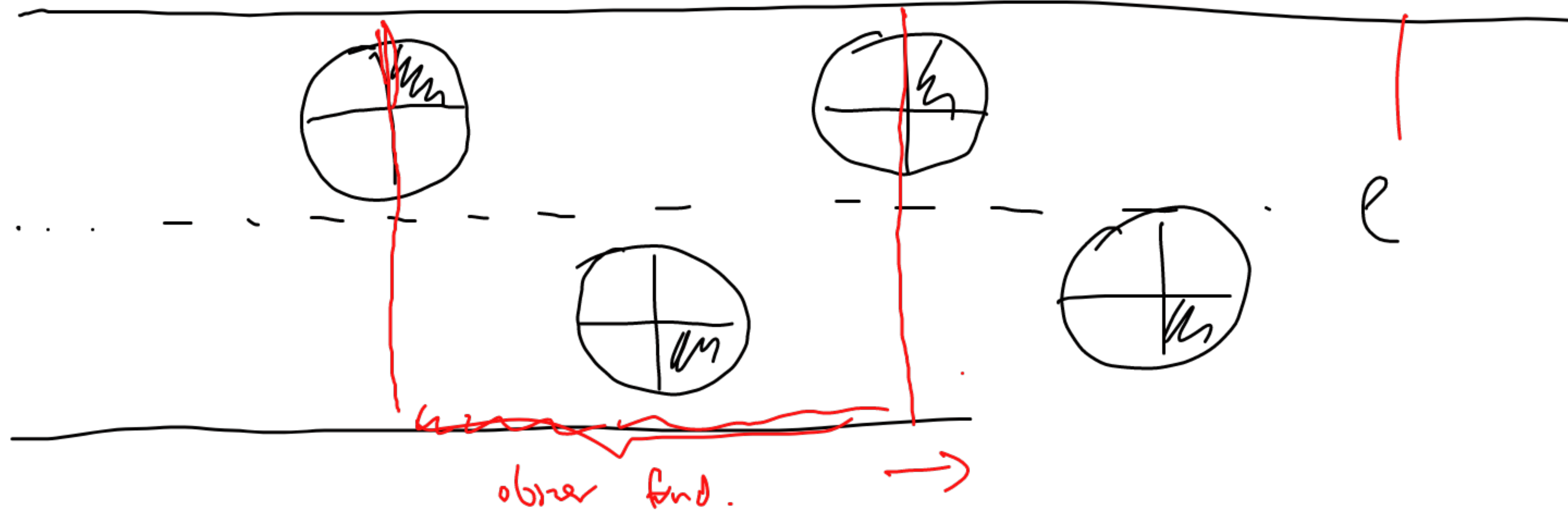
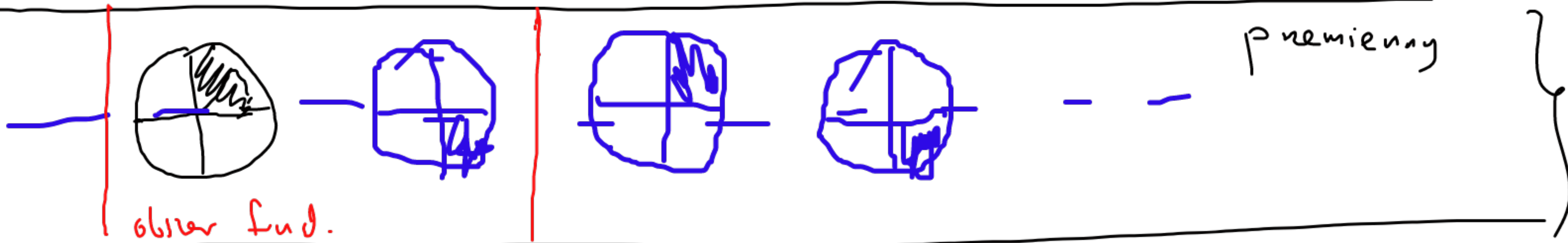
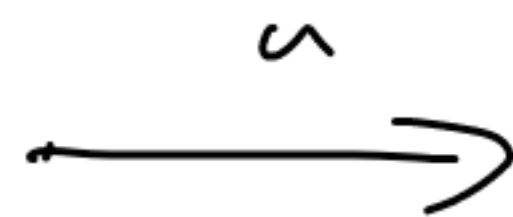


$$\Gamma_1 = \langle T_u \rangle \xrightarrow{u}$$

$$\Gamma_1 = \{T_{ku} : k \in \mathbb{Z}\}$$



$$\Gamma_2 = \langle G_u^l \rangle \xrightarrow{u}$$



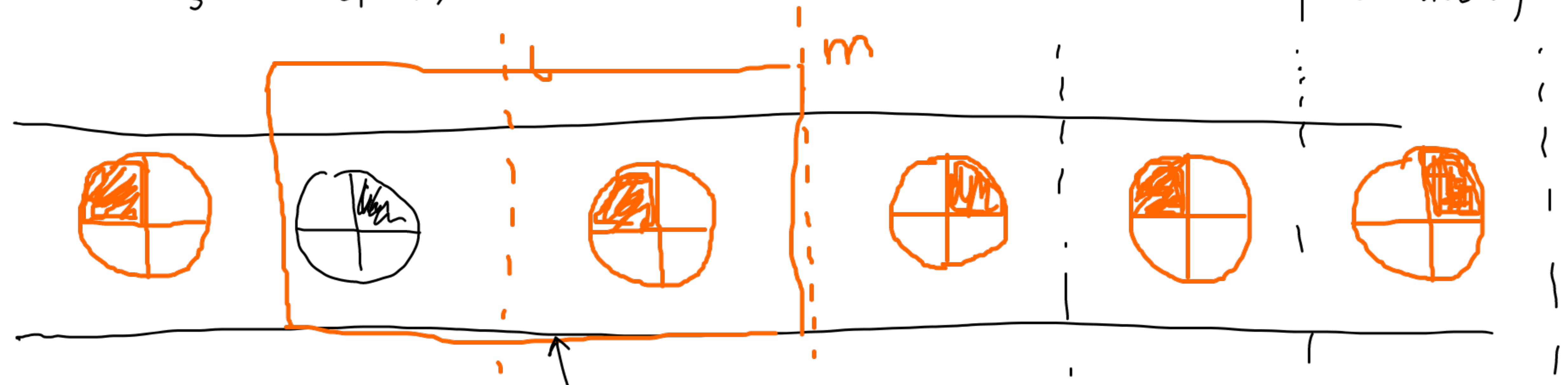
(jw. Γ_2 ,
ale inaczej,
złożone punkty)

VIII-1

$$\Gamma_3 = \langle R_l, R_m \rangle$$

l, m -wznie pionowe proste

pozdunowy

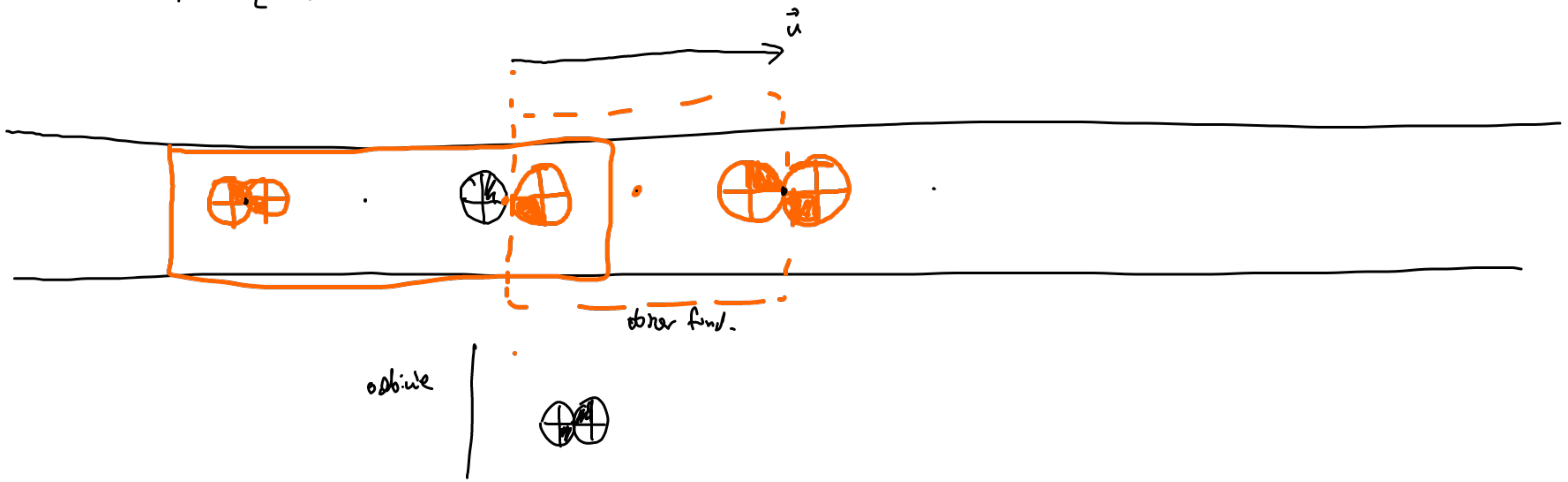


oblar fundamentalny

VIII-1

$$\Gamma_4 = \{H_A, H_B\}$$

Übung

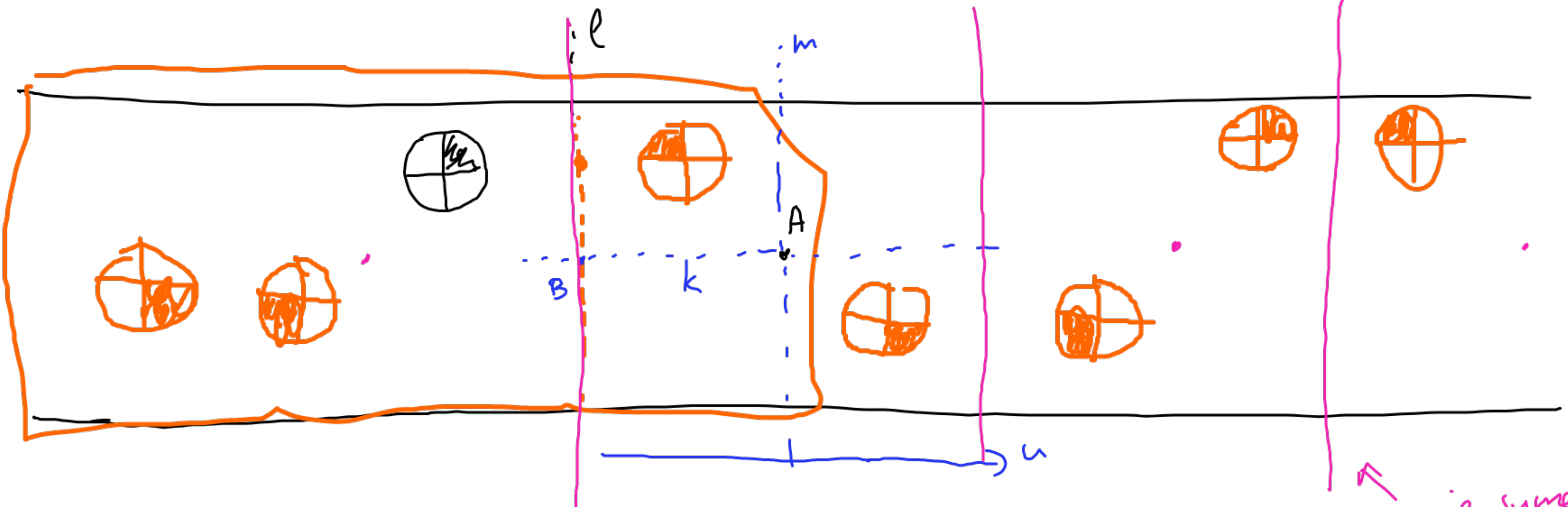


VIII.43

$$\Gamma_5 = \langle R_\ell, H_A \rangle$$

ℓ - pionowa prosta, $A \notin \ell$

fabry



$$\begin{aligned}
 & H_A = R_k R_m \\
 & R_\ell H_A = R_\ell R_k R_m = H_B R_m = \underbrace{R_\ell R_k R_\ell}_{H_B} R_m = R_k T_u = G_u^k
 \end{aligned}$$

osie symetrii:

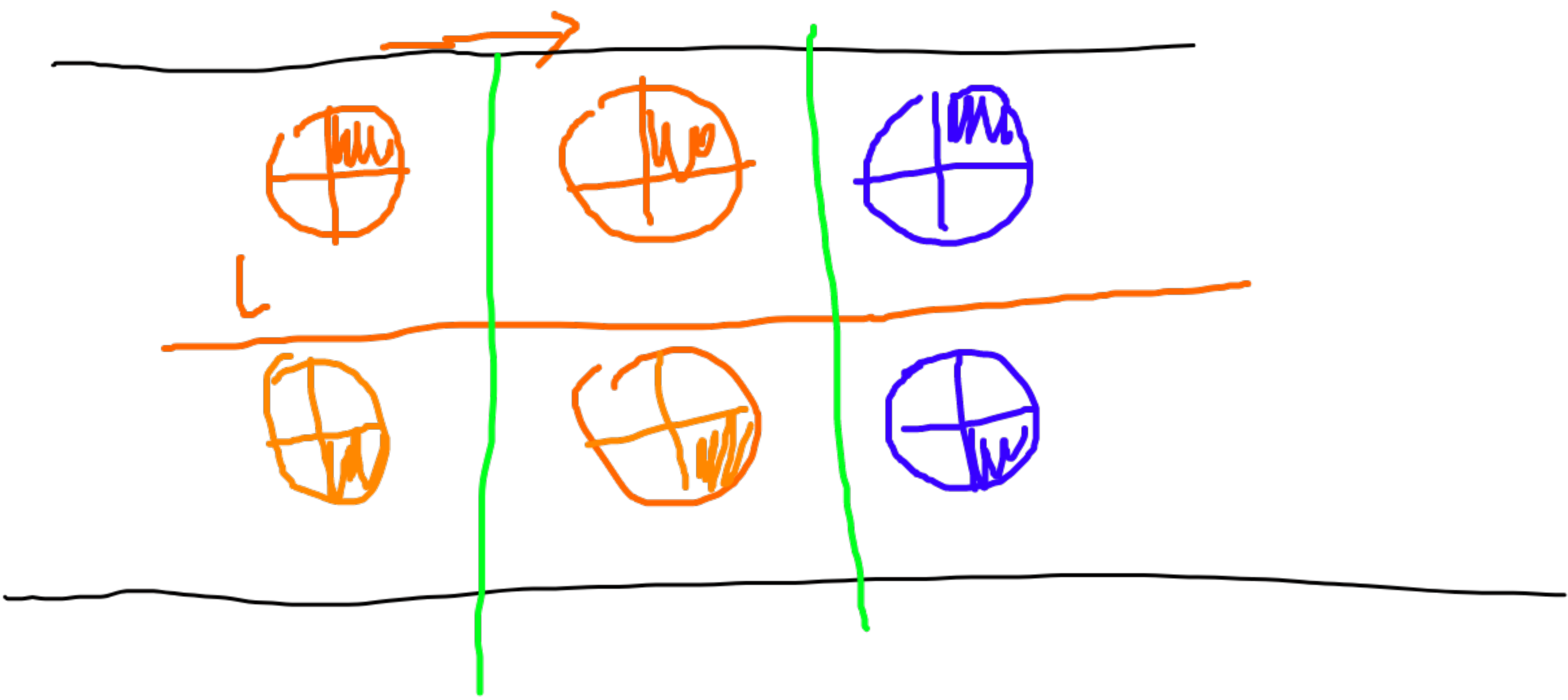
VIII-4

$$\Gamma_6 = \langle T_u, R_e \rangle = \{ T_{k\bar{u}} : k \in \mathbb{Z} \cup \{ \nu \} \cup G_{kn}^e : k \in \mathbb{Z} \}$$

\bar{u}

l-primne puste

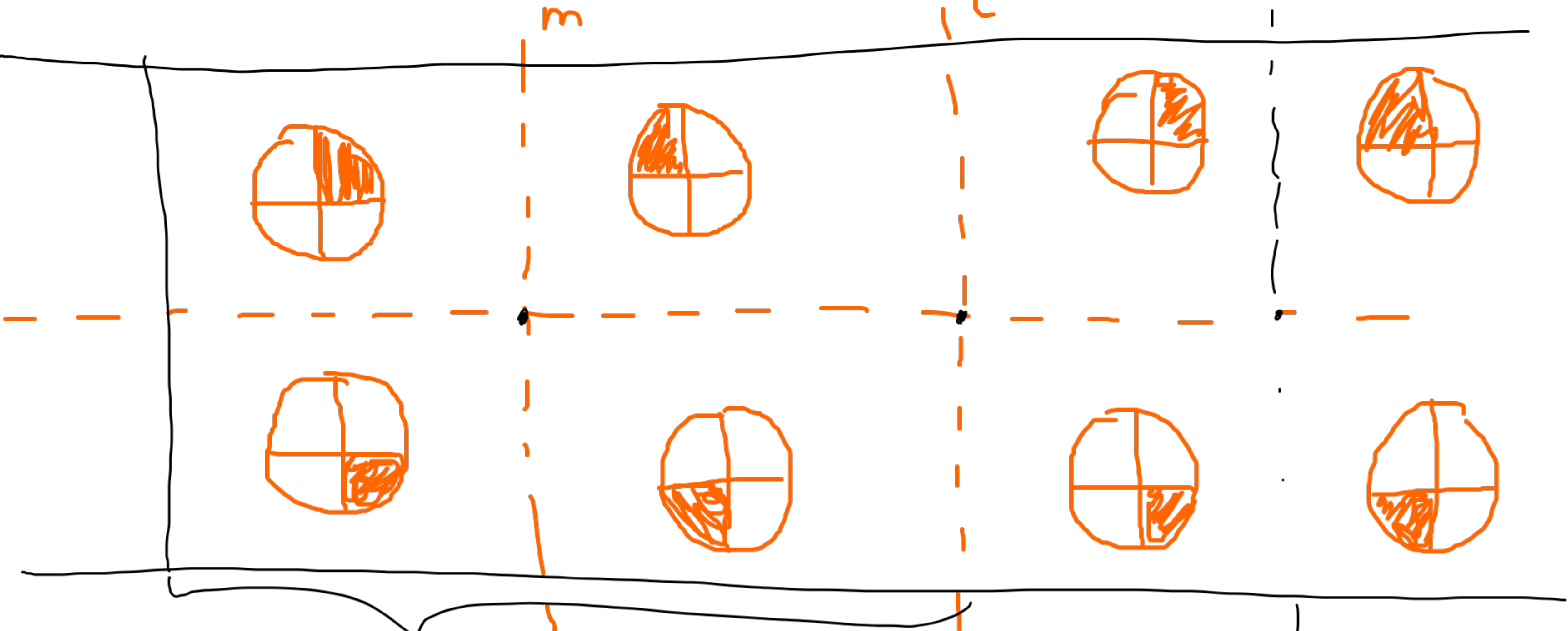
wównikowy



VIII-4 $\Gamma_7 = \langle R_l, R_m, R_n \rangle$

paste - ||

krzyżowy



obser fundamentalny