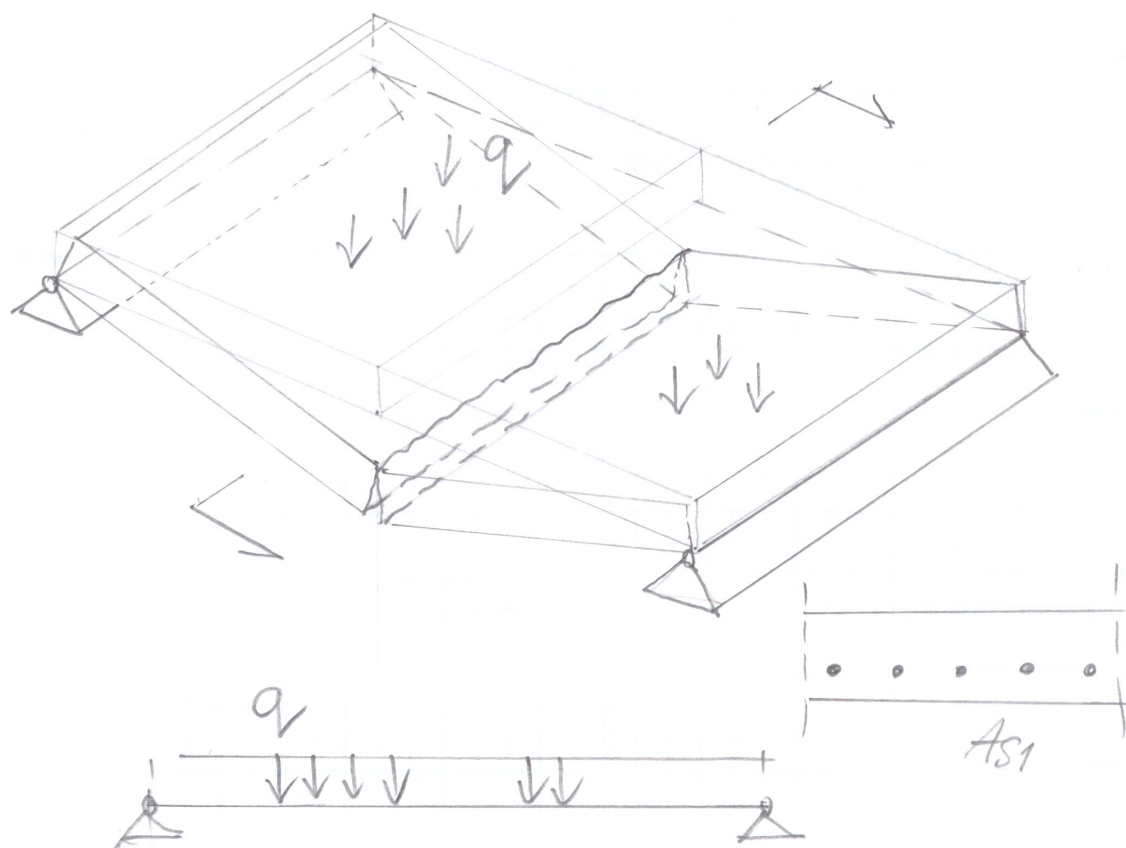
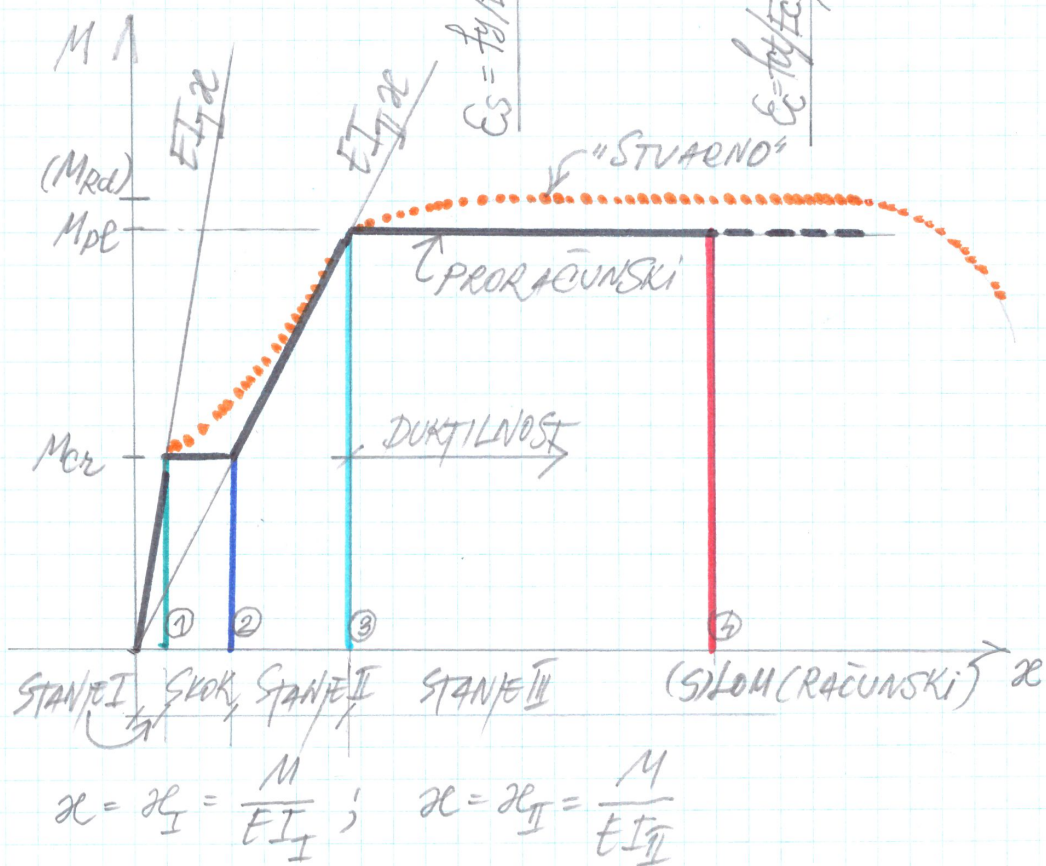
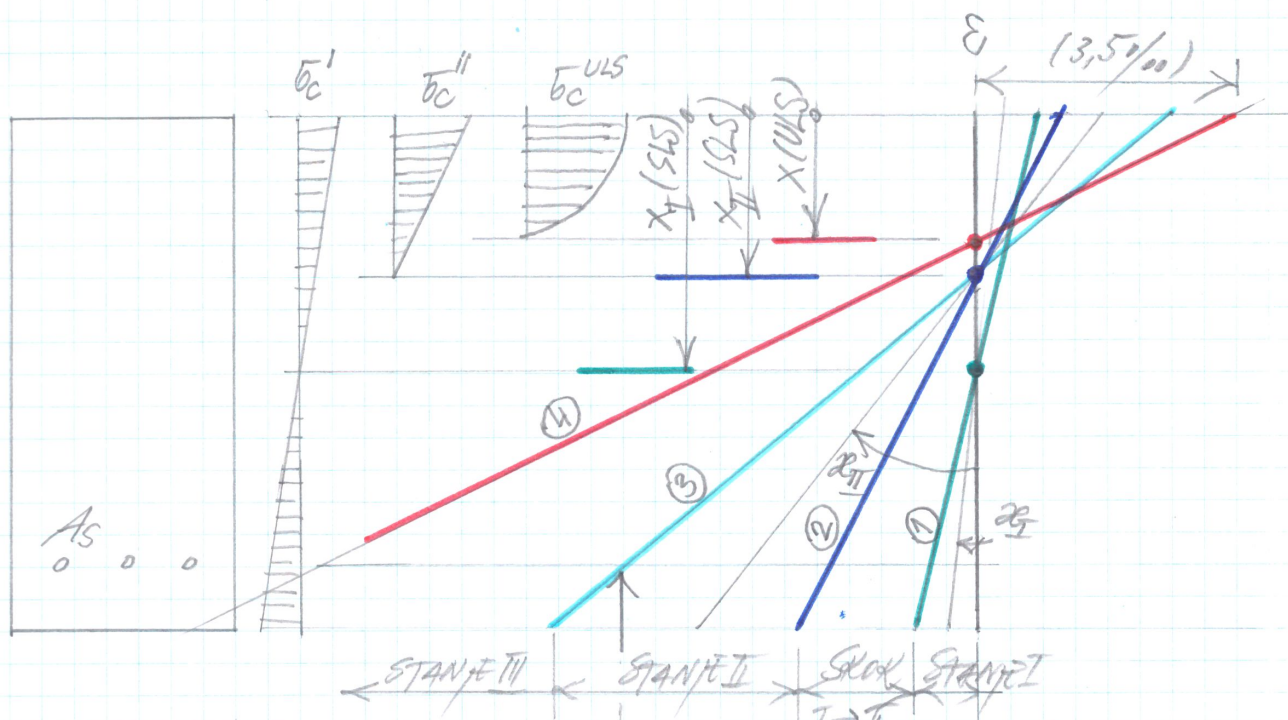
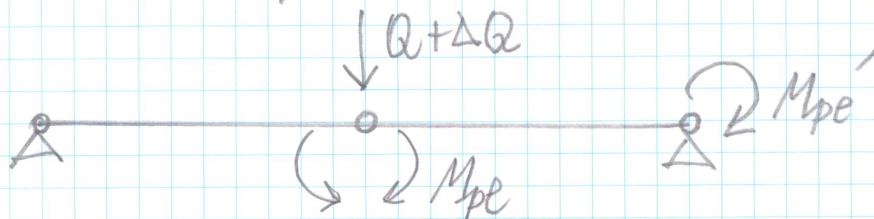
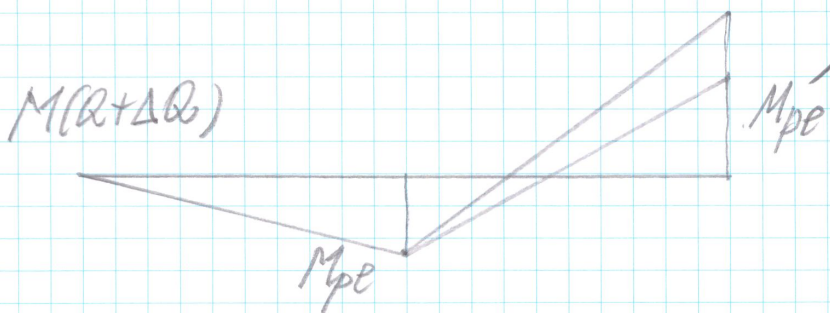
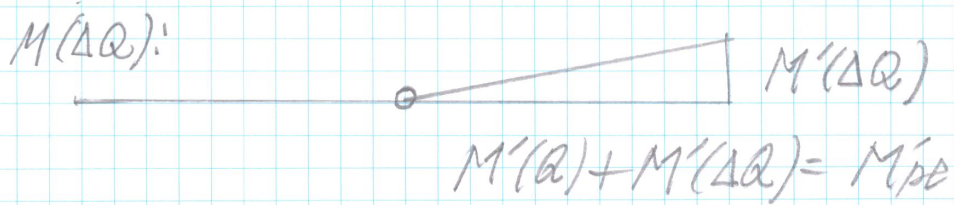
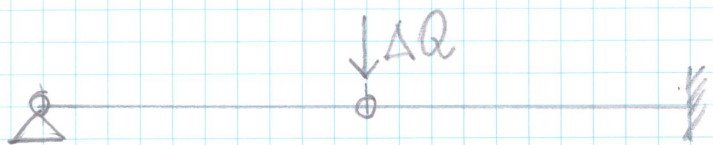
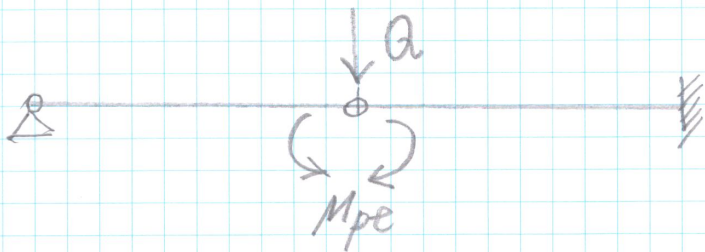
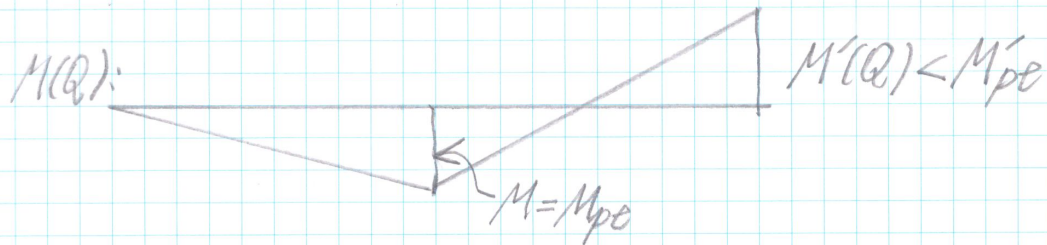
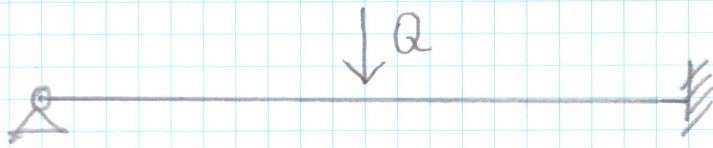


$$q \uparrow \rightarrow M_{\max}(q) \uparrow \rightarrow \sigma_{s1} \uparrow$$

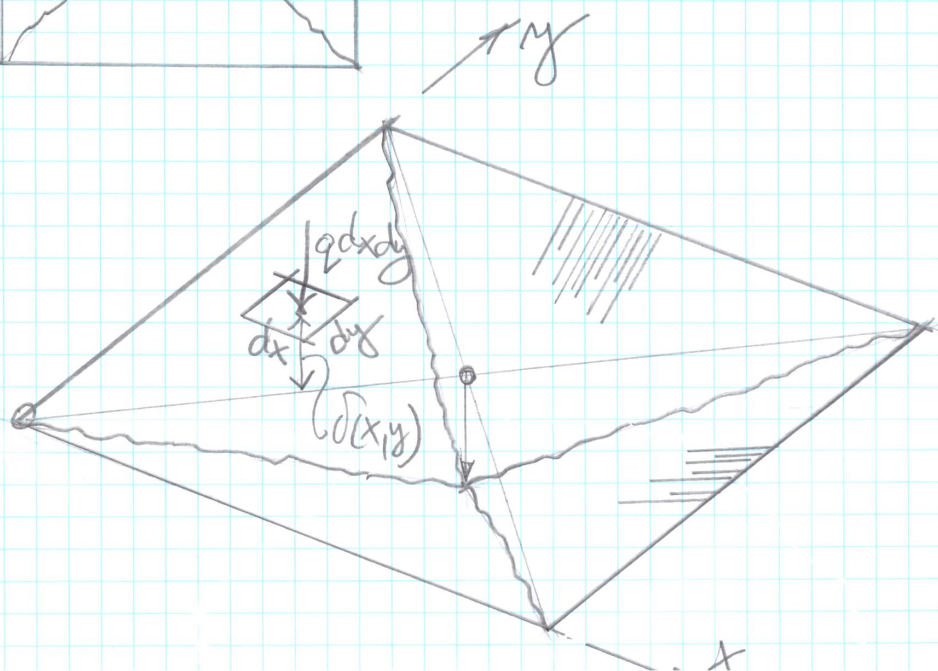
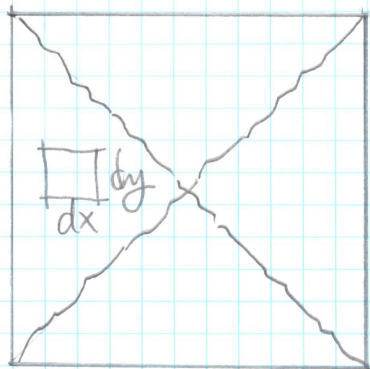
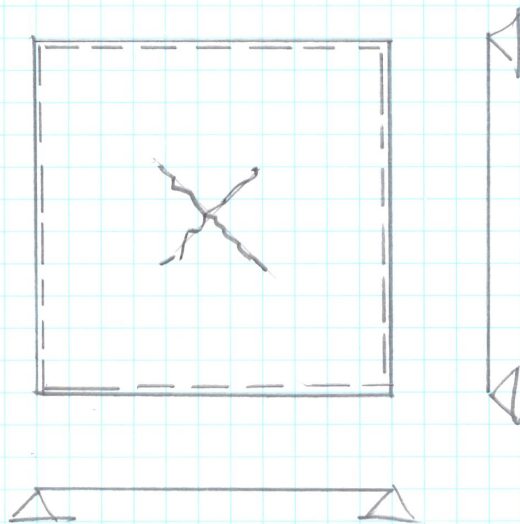
- * MALO q - NEMA PRSLINA (STANJE I)
- * EKSPLOATACIONO q - PRSLINE (STANJE II)
- * GRANIČNO (ULS) q - STANJE III

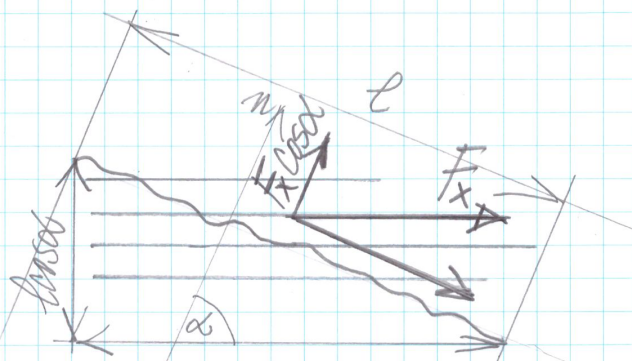
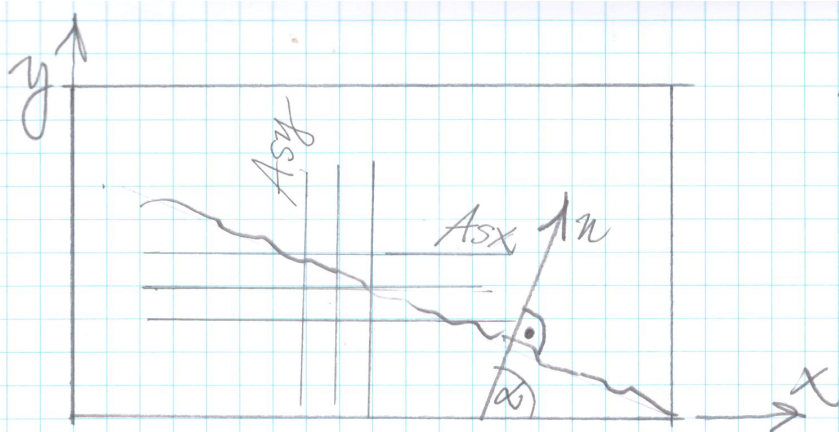


PRIMER 2



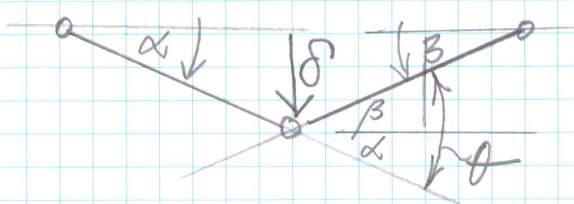
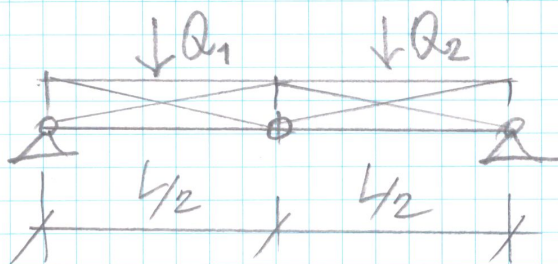
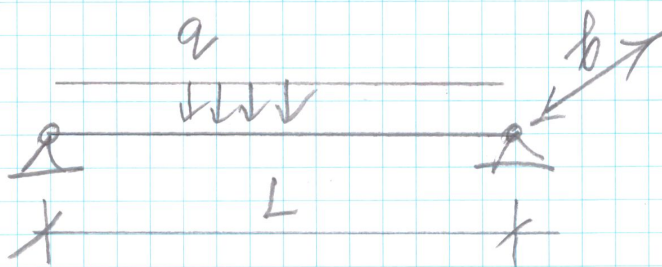
PRIMER 3





- * A_{sx} $\text{cm}^2 (\text{mm}^2) / \text{m}'$ MERENO DUŽ y -OSE
- * AKO JE DUŽINA KOJE LINIJE LOMA l , DUŽ NJE IMA x -ARMATURE: $A_{sx} \cdot (l \cdot \cos \alpha)$, A SILA U NJOJ IZNOSI $F_x = f_y \cdot A_{sx} \cdot l \cdot \cos \alpha$
- * SILU RAZLAŽEMO NA PRAVAO $\perp$ NA LINIJU LOMA I NA TANGENCIJALAN. UPRAVNA DAJE DOPRINOS MOMENTU PLASTIČNOSTI $M_p(\alpha)$. UPRAVNA SILA JE $F_x \cos \alpha = f_y \cdot A_{sx} \cdot l \cdot \cos^2 \alpha$
- * SLIČNO I ZA A_{sy} $F_y \sin \alpha = f_y \cdot A_{sy} \cdot l \cdot \sin^2 \alpha$
- * UKUPNA SILA ZA DOBIVANJE $M_{pe}(\alpha)$ - SILA UPRAVNA NA LINIJU LOMA $F(\alpha) = F_x \cos \alpha + F_y \sin \alpha$
 $F(\alpha) = l (A_{sx} \cdot f_y \cdot \cos^2 \alpha + A_{sy} \cdot f_y \cdot \sin^2 \alpha)$
- * $M_{pe}(\alpha) = (F(\alpha) \cdot z) / l$ (NA JEDINICU DUŽINE)
 $M_{pe} = M_{pe}(x) \cdot \cos^2 \alpha + M_{pe}(y) \cdot \sin^2 \alpha$

PRIMER 5



$\delta (=1,0, \text{ uSIVAJE PO ŽELI})$

$$\tan \alpha \approx \alpha (\text{rad}) = \frac{\delta}{\frac{L}{2}} = \frac{2\delta}{L}$$

$$\alpha = \frac{2\delta}{L} = \beta$$

$$\theta = \alpha + \beta = \frac{4\delta}{L}$$

$$R_{US} = (M_{pe} \cdot b) \cdot \theta = M_{pe} \cdot b \cdot \frac{4\delta}{L}$$

$$Q_1 = \frac{1}{2} \cdot b \cdot q = Q_2$$

$$R_{SS} = 2 \cdot \left(\frac{1}{2} \cdot b \cdot q \cdot \frac{\delta}{2} \right) = \frac{1}{2} L b q \delta$$

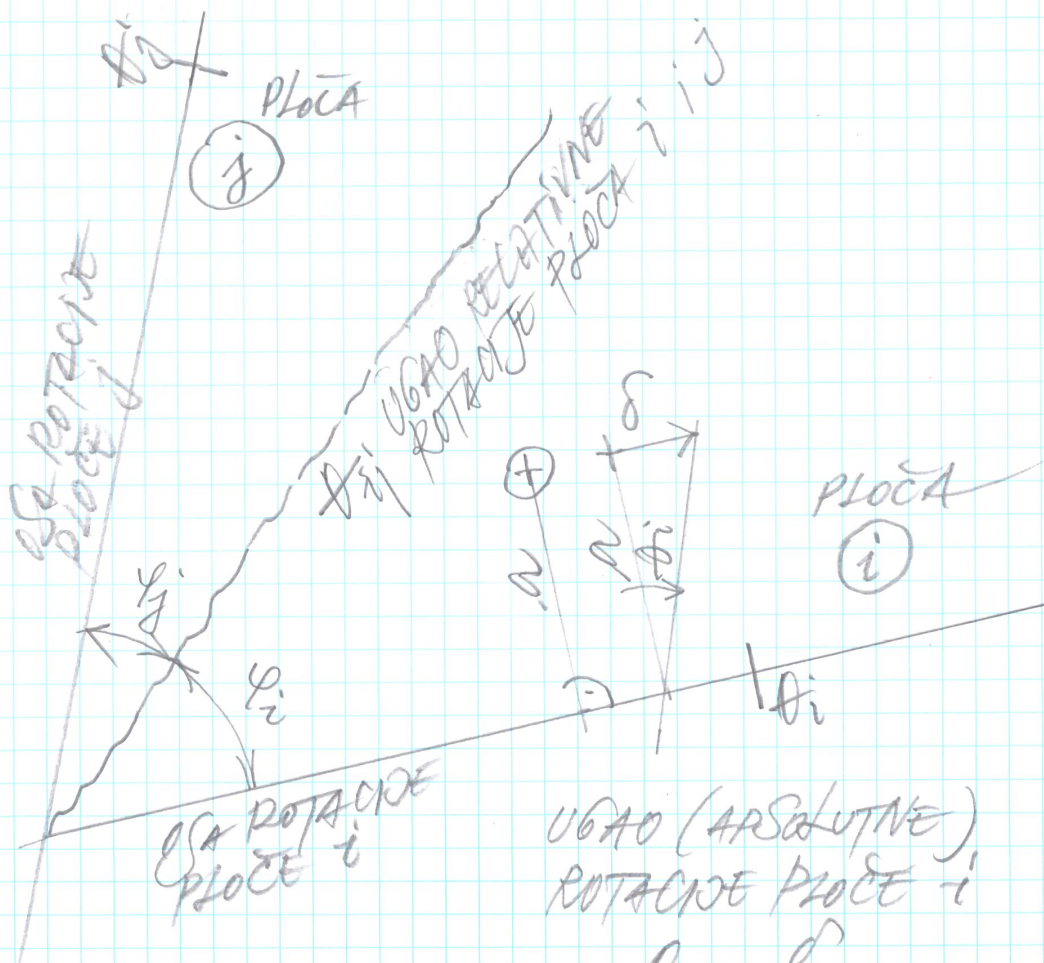
$$R_{US} = R_{SS} :$$

$$4 M_{pe} \cdot \frac{b \cdot \delta}{L} = \frac{1}{2} L b q \cdot \delta$$

$$q = \frac{8 M_{pe}}{L^2} \quad (\text{NOSIVOST})$$

$$1 Li \quad M_{pe} = \frac{q L^2}{8} \quad (\text{PRORACUN PRESEČNE SILI})$$

SLIKA 6



UGAO (ABSOLUTNE)
ROTACIJE PLOČE i

$$\theta_i = \frac{d}{a}$$

(IZ POZNATOG POMERANJA
NJEKE TAČKE)

$$\theta_{ij} = \theta_i \cos \varphi_i + \theta_j \cos \varphi_j$$