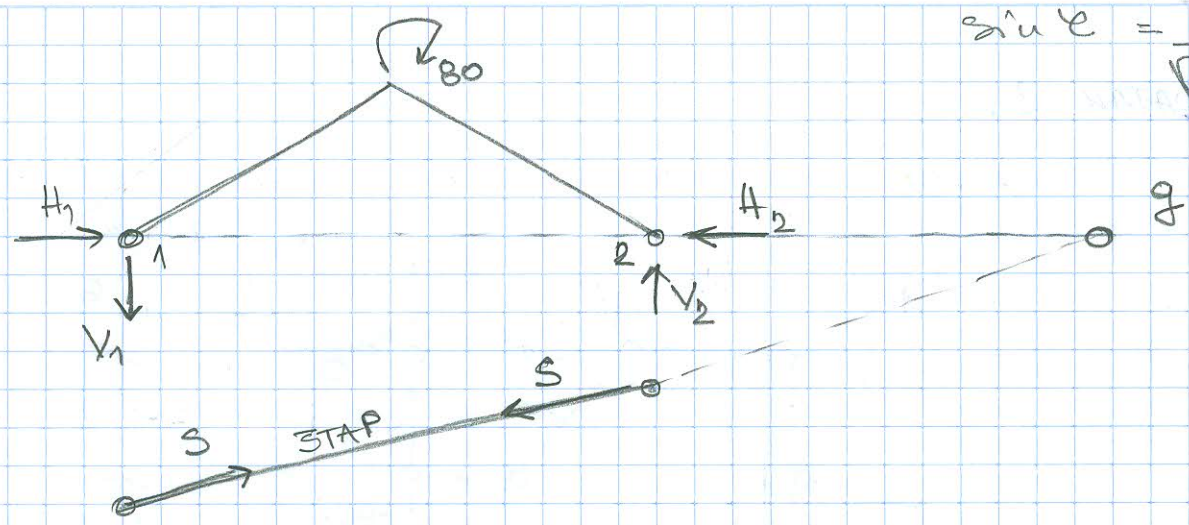
kako je $\sin\varphi = \frac{2}{\sqrt{29}}$

II

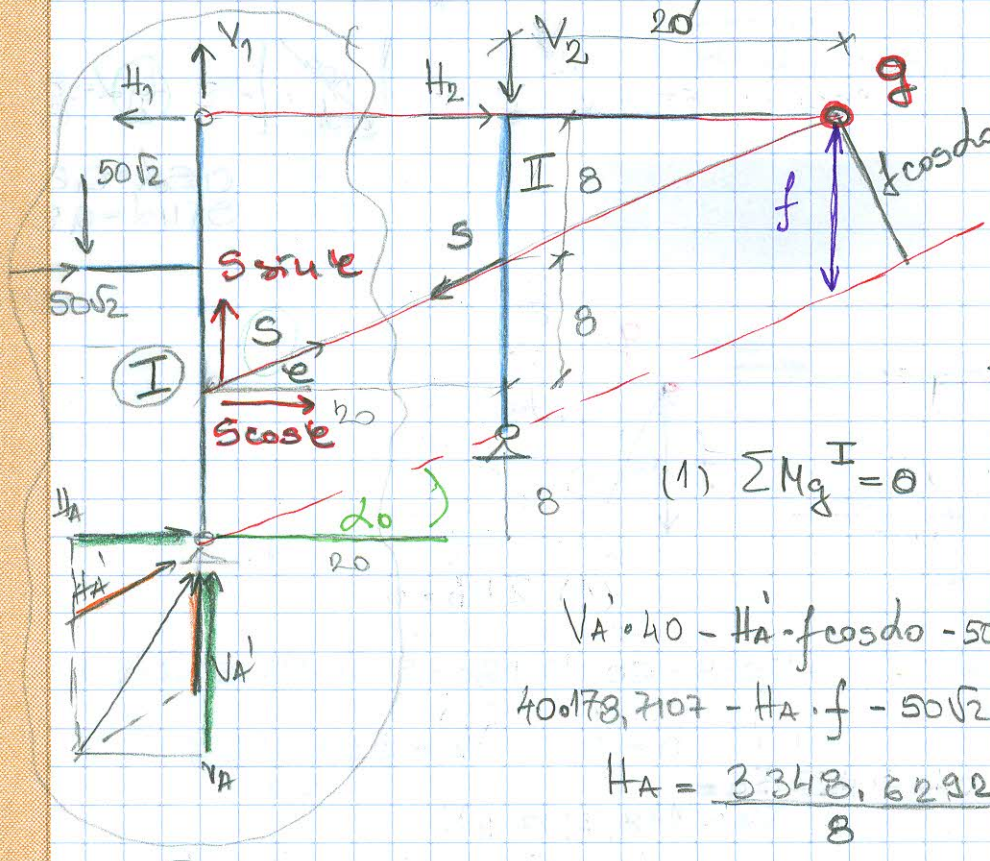


$\Sigma M_2 = 0 \quad -V_1 \cdot 20 + 80 = 0 \quad V_1 = \frac{80}{20} = 4\,kN$

$\Sigma V = 0 \quad V_2 = V_1 = 4\,kN$

$\Sigma H = 0 \quad H_1 = H_2$

POČETNI SISTEM : Sve nepoznate veze su mi potrebne na ploči II iznad i na ploči I pa je dovoljno da izračunam samo I a da ne postavljam sve sile na II



$\varphi = \alpha_0 \quad \operatorname{tg}\varphi = \frac{8}{20} = \frac{2}{5}$

$\operatorname{tg}\alpha_0 = \frac{2}{5} \quad f = 8$

(1) $\Sigma M_g^I = 0$

* Zglobom g sam dve nepoznate isključila S i H_1.

$V_A' \cdot 40 - H_A' \cdot f\cos\alpha_0 - 50\sqrt{2} \cdot 48 - 50\sqrt{2} \cdot 8 + V_1 \cdot 40 = 0$

$40 \cdot 178,7107 - H_A \cdot f - 50\sqrt{2}(48+8) + 4 \cdot 40 = 0$

$H_A = \frac{3348,6292}{8} = 418,5787\,kN$

3) $\Sigma H^I = 0$

$H_A + S\cos\varphi + 50\sqrt{2} - H_1 = 0$

$H_1 = 1187,5252\,kN$

$H_2 = H_1$

$V_A = V_A' + H_A \cdot \operatorname{tg}\alpha_0 = 178,7107 + 418,5787 \cdot \frac{2}{5}$

$= 346,1421\,kN$

(2) $\Sigma V^I = 0$

$V_A + S\sin\varphi + V_1 - 50\sqrt{2} = 0$

$S\sin\varphi = -279,4315$

$S \cdot \frac{8}{21,54} = -279,4315 \Rightarrow S = -752,3693$