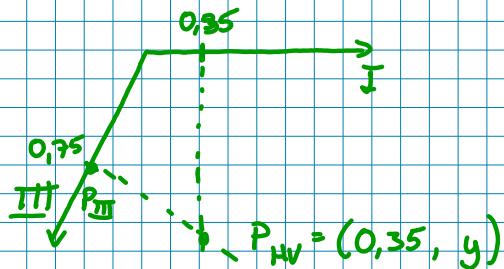


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$$\text{Ex 5.6.1: } \vec{I} = 0,35 \quad \vec{II} = 0,75$$

BOGENS METODE



$$P_{\text{II}} = 0,75 \begin{pmatrix} \cos 240 \\ \sin 240 \end{pmatrix} = \begin{pmatrix} -0,375 \\ -0,6495 \end{pmatrix}$$

$$s_{\text{II}} = \frac{\sin 240}{\cos 240}$$

$$s'_{\text{II}} = -\frac{1}{s_{\text{II}}} = -\frac{\cos 240}{\sin 240} = -0,5774$$

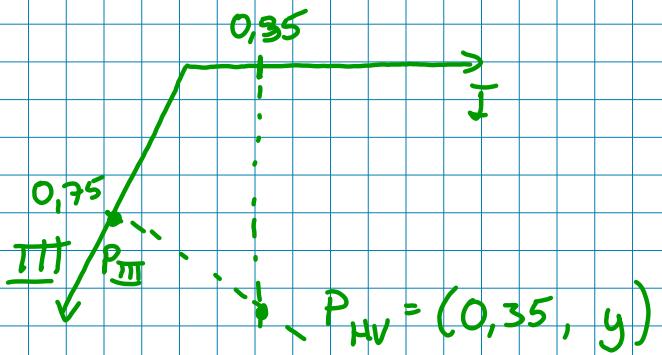
$$s'_{\text{II}} = \frac{(P_{\text{HV},y} - P_{\text{II},y})}{(P_{\text{HV},x} - P_{\text{II},x})}$$

$$\begin{aligned} P_{\text{HV},y} &= s'_{\text{II}} (P_{\text{HV},x} - P_{\text{II},x}) + P_{\text{II},y} \\ &= -1,0681 \end{aligned}$$

$$\angle \vec{HV} = \arctan \left(\frac{-1,0681}{0,35} \right) = -71,86^\circ$$

$$Ex \quad 5.6.1: \quad \vec{I} = 0,35 \quad \vec{II} = 0,75$$

BOGENS METODE



$$P_{\text{II}} = 0,75 \begin{pmatrix} \cos 240 \\ \sin 240 \end{pmatrix} = \begin{pmatrix} -0,375 \\ -0,6495 \end{pmatrix}$$

$$s_{\text{III}} = \frac{\sin 240}{\cos 240}$$

$$s'_{\text{III}} = -\frac{1}{s_{\text{III}}} = -\frac{\cos 240}{\sin 240} = -0,5774$$

$$s'_{\text{III}} = \frac{(P_{\text{HV},y} - P_{\text{II},y})}{(P_{\text{HV},x} - P_{\text{II},x})}$$

$$\begin{aligned} P_{\text{HV},y} &= s'_{\text{III}} (P_{\text{HV},x} - P_{\text{II},x}) + P_{\text{II},y} \\ &= -1,0681 \end{aligned}$$

$$\angle \overrightarrow{HV} = \arctan \left(\frac{-1,0681}{0,35} \right) = -71,86^\circ$$

VEKTOR-METODEN

$$\begin{aligned}\vec{I} &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} & \vec{II} &= \begin{pmatrix} \cos 240 \\ \sin 240 \end{pmatrix} \\ \vec{HV} &= \begin{pmatrix} x \\ y \end{pmatrix}\end{aligned}$$

DA \vec{I} OG \vec{II} ER ENHEDSVEKTORER

$$\vec{HV} \cdot \vec{I} = 0,35 \quad (1)$$

$$\vec{HV} \cdot \vec{II} = 0,75 \quad (2)$$

FRA (1)

$$x \cdot 1 + y \cdot 0 = 0,35 \Leftrightarrow x = 0,35$$

FRA (2)

$$x \cdot \cos 240 + y \cdot \sin 240 = 0,75 \Leftrightarrow$$

$$y = \frac{0,75 - x \cdot \cos 240}{\sin 240} = -1,0681$$

$$\angle \vec{HV} = \arctan \frac{-1,0681}{0,35} = -71,86^\circ$$