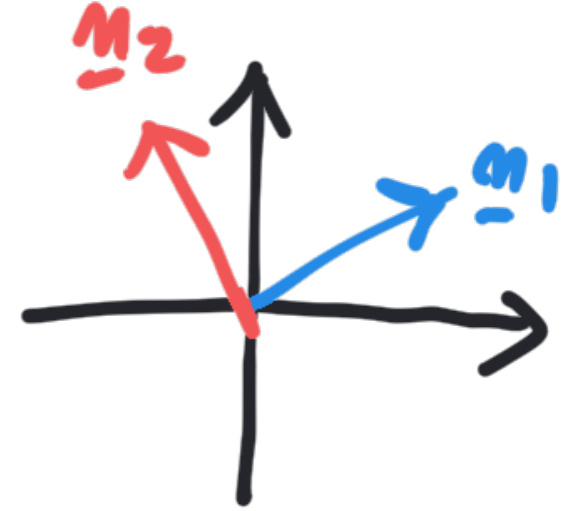


$$\underline{I} = \begin{pmatrix} 1.25 & 0.75 \\ 0.75 & 0.45 \end{pmatrix}$$



$$\det(\underline{I} - \sigma \underline{I}) = \det \begin{pmatrix} 1.25 - \sigma & 0.75 \\ 0.75 & 0.45 - \sigma \end{pmatrix}$$

$$= (1.25 - \sigma)(0.45 - \sigma) - (0.75)^2 = \sigma^2 - 1.7\sigma$$

$$= \sigma(\sigma - 1.7)$$

$$\sigma_1 = 1.7$$

$$\sigma_1 > \sigma_2$$

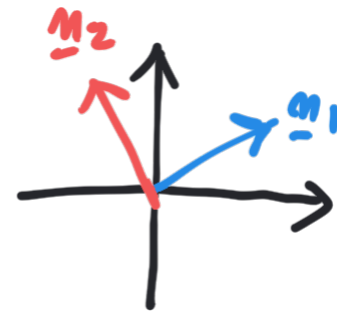
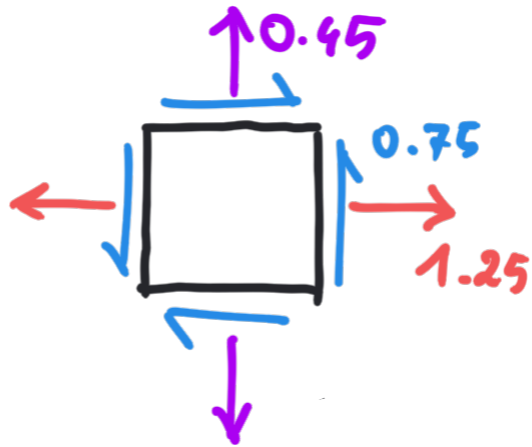
$$\sigma_2 = 0$$

$$\begin{aligned} \underline{m}_1 &\approx \begin{pmatrix} 0.75 \\ 0.45 \end{pmatrix} / 0.87 \\ &\approx \begin{pmatrix} 0.86 \\ 0.52 \end{pmatrix} \end{aligned}$$

$$\underline{I} - \sigma_1 \underline{I} = \begin{pmatrix} -0.45 & 0.75 \\ 0.75 & -1.25 \end{pmatrix}$$

$$\sqrt{0.75^2 + 0.45^2} = 0.87$$

$$I = \begin{pmatrix} 1.25 & 0.75 \\ 0.75 & 0.45 \end{pmatrix}$$

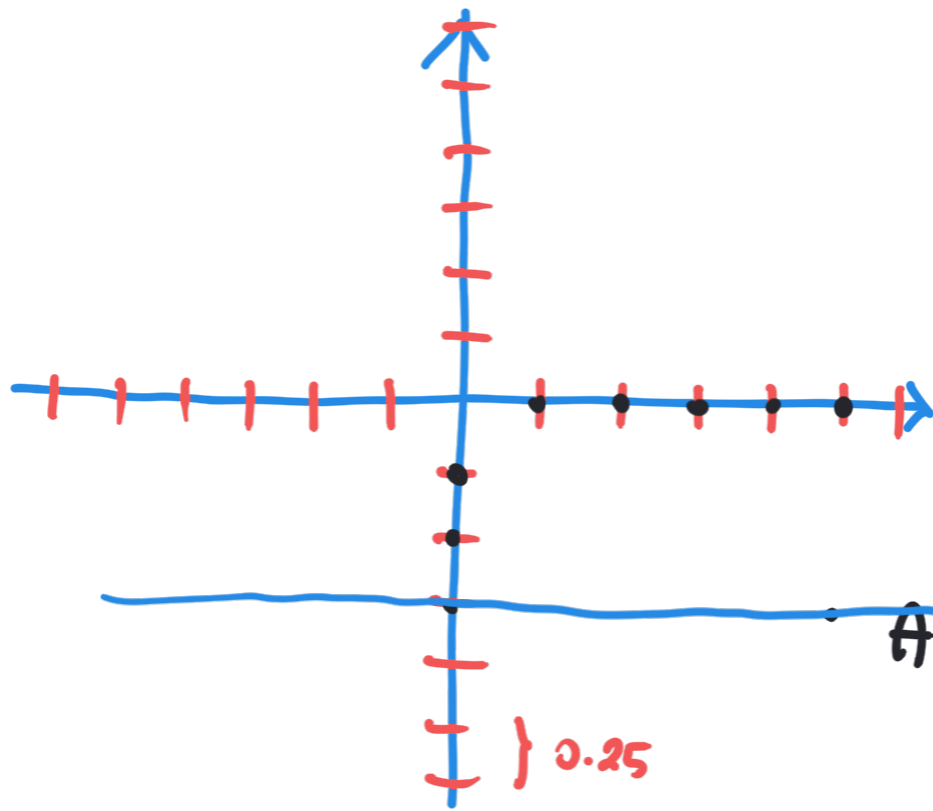


$$\sigma_1 = 1.7$$

$$\sigma_2 = 0$$

$$m_1 \approx \begin{pmatrix} 0.75 \\ 0.45 \end{pmatrix} / 0.87$$

$$m_2 \approx \begin{pmatrix} 0.86 \\ 0.52 \end{pmatrix}$$



$$\theta = 0$$

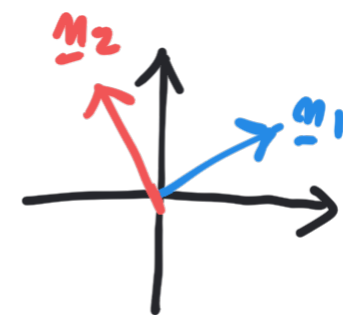
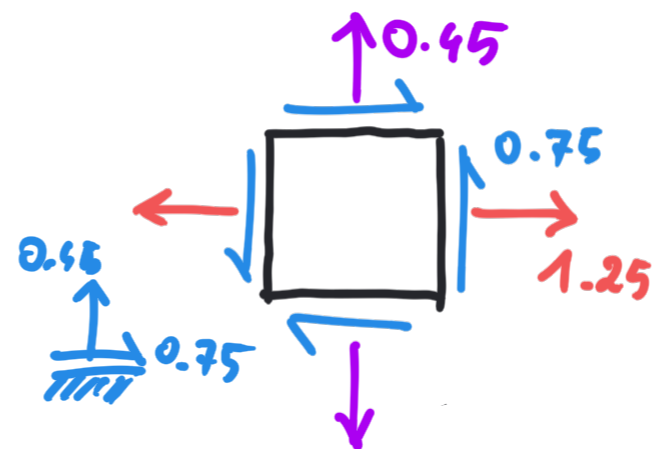


$$\sigma_n = 1.25$$

$$\tau_{nm} = -0.75$$

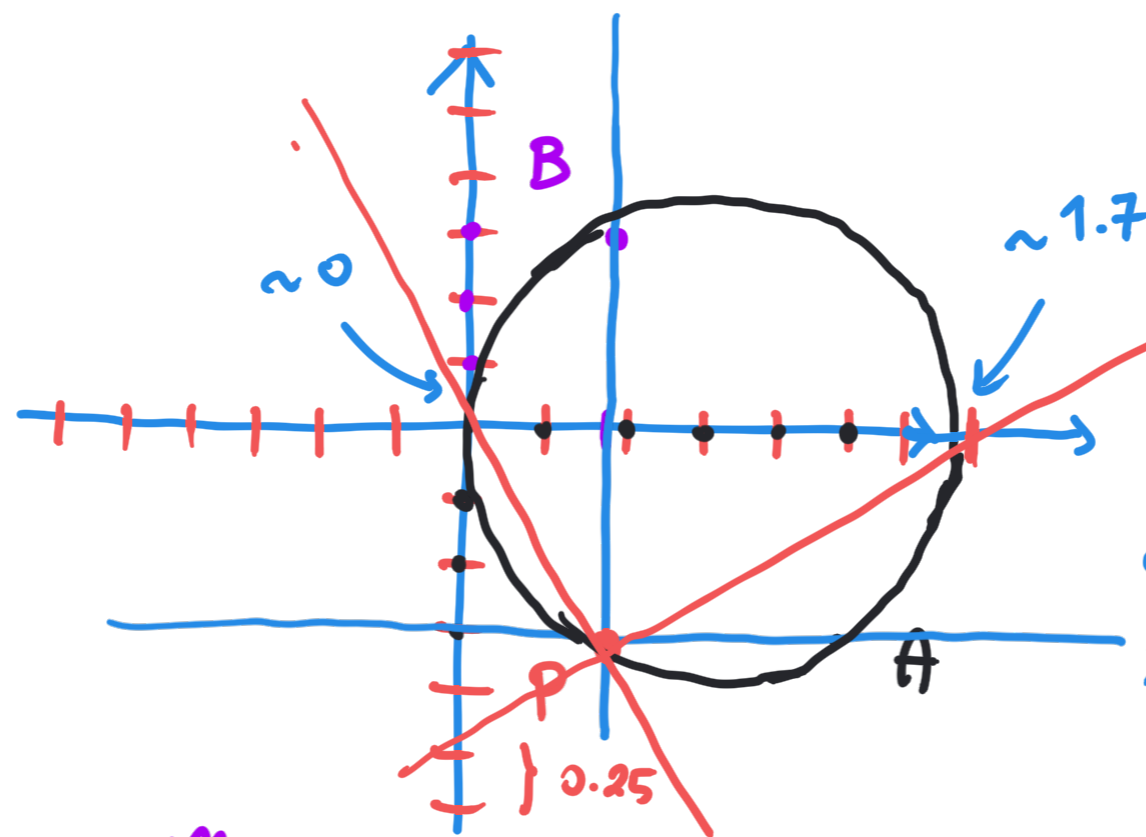


$$T = \begin{pmatrix} 1.25 & 0.75 \\ 0.75 & 0.45 \end{pmatrix}$$



$$\sigma_1 = 1.7$$

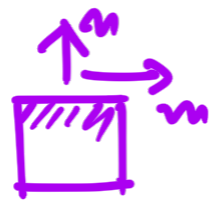
$$\sigma_2 = 0$$



$$m_1 \approx \begin{pmatrix} 0.75 \\ 0.45 \end{pmatrix} / 0.87$$

$$\approx \begin{pmatrix} 0.86 \\ 0.52 \end{pmatrix}$$

$$\sigma = \frac{F}{2}$$



$$\sigma_m = 0.45$$

$$\tau_{max} = +0.75$$

