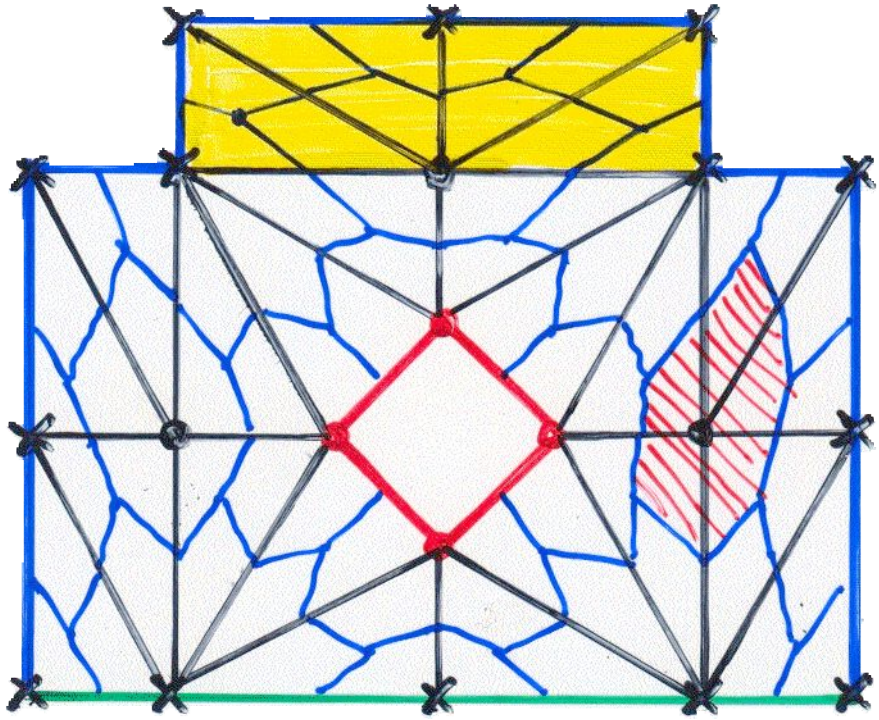
Beispiel: Example



$x \in \omega := \mathring{\omega} = \{\bullet\} \cup \gamma_N = \{\times\}$ $\hat{=}$ $x^{(i)} : i \in \omega_h = \mathring{\omega}_h \cup \gamma_{N,h}$

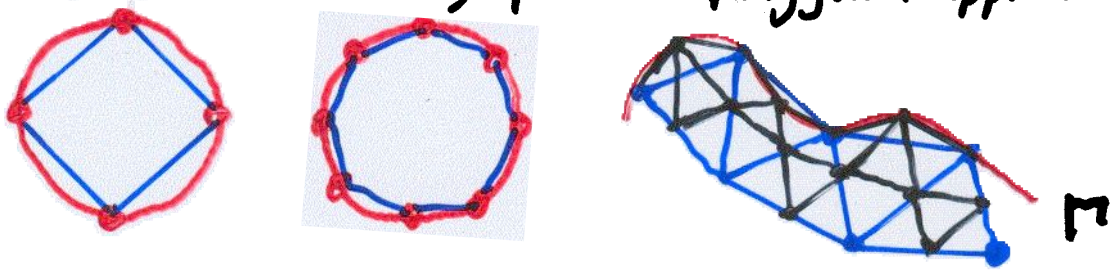
$x \in \gamma = \gamma_1 = \{\bullet\}$ $\hat{=}$ $x^{(i)} : i \in \gamma_h = \gamma_{1h}$

$\bar{\omega} = \omega \cup \gamma$ $\hat{=}$ $\bar{\omega}_h = \omega_h \cup \gamma_h$

Bemerkung 3.2: Remark 3.2

Bei krummlinigen Randteilen $\rightsquigarrow$ polygonale Approximation

Curvilinear boundary parts $\rightsquigarrow$ polygonal approximations



$$\bar{\Omega} = \bigcup_{r \in R_h} \bar{\delta}_r \,, \quad \mathcal{T}_\Delta = \{\tilde{\delta}_r : r \in R_h\} \ni \tilde{\delta}_r \xleftrightarrow[\text{Abb.}]{\text{nichtlin.}} \Delta = \triangle$$

reference triangle

$h \to 0$ ↑

$$\bar{\Omega}_h = \bigcup_{r \in R_h} \bar{\delta}_r \,, \quad \mathcal{T}_\Delta = \{\delta_r : r \in R_h\} \ni \delta_r \xleftrightarrow{F_r\text{-Abb.}} \Delta = \triangle$$

Referenzdreieck