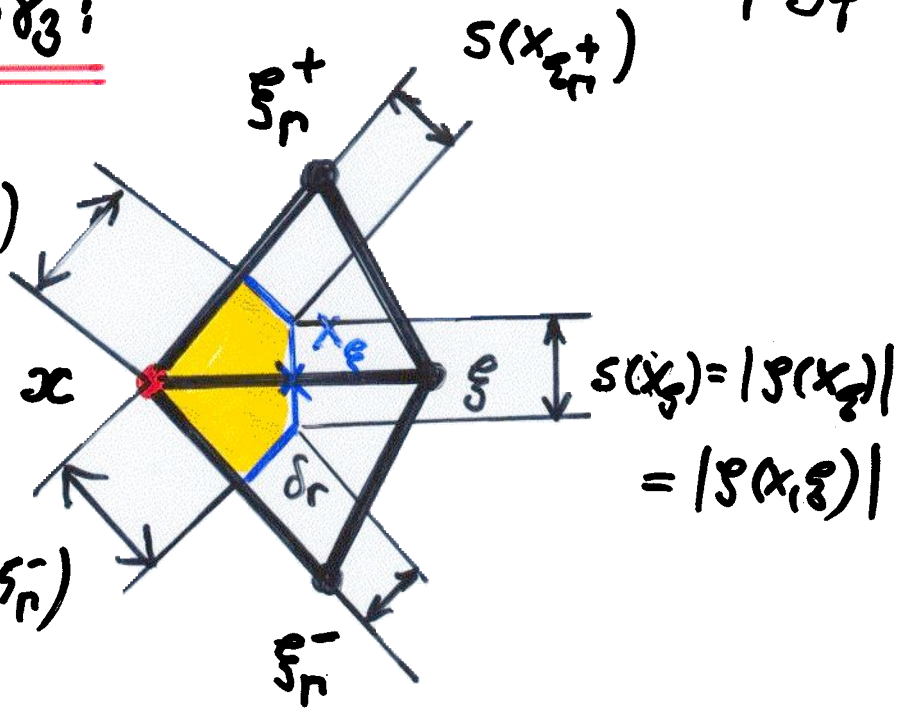
b) $x \in \gamma_h := \gamma_2 \cup \gamma_3$:



e.g. $\partial\mathcal{X}_h = \partial\mathcal{X}_3 = \partial\mathcal{X}_3(x)$

$$h(x) = \frac{1}{2}\left(h(x,\xi_r^-) + h(x,\xi_r^+)\right)$$

④ $$\int_{\partial\mathcal{X}_3(x)} \varkappa u \, ds \approx \bar{\varkappa}(x) u(x) \underbrace{\left[\frac{1}{2}\left(h(x,\xi_r^-) + h(x,\xi_r^+)\right)\right]}_{=: h(x)}$$

with $\bar{\varkappa}(x) = \varkappa(x)$ if $x \in C(\Gamma_3)$

⑤ $$\int_{\partial\mathcal{X}_h(x)} g \, ds \approx \bar{g}(x) h(x)$$ with $\bar{g}(x) = g(x)$ if $g \in C(\Gamma_3)$

Result: $u \mapsto v = u_h$, $\ell \mapsto \ell_h$, $x \in \gamma_h$ (γ_3)

$$-\frac{1}{h(x)} \sum_{\xi \in S'(x)} \bar{a}(x_\xi) \frac{v(\xi) - v(x)}{h(x,\xi)} s(x_\xi) + \underbrace{\frac{H(x)}{h(x)} \bar{c}(x) v(x)}_{= O(h)} + \underbrace{\bar{\varkappa}(x) v(x)}_{=: \bar{\varkappa}(x) v(x)} = \underbrace{\frac{H(x)}{h(x)} \bar{f}(x)}_{= O(h)} + \underbrace{\bar{g}(x)}_{\bar{g}(x)}$$

can be omitted!

$(6)_\ell$

$$\underbrace{-\frac{1}{h(x)} \sum_{\xi \in S'(x)} \bar{a}(x_\xi) \frac{v(\xi) - v(x)}{h(x,\xi)} s(x_\xi) + \bar{\varkappa}(x) v(x)}_{=: \ell_h v(x)} = \underbrace{\bar{g}(x)}_{=: g_h(x)}$$