$$\bar{\nabla}_{\frac{\partial}{\partial x^\lambda}} \frac{\partial}{\partial x^\mu} = \bar{\nabla}_{\frac{\partial}{\partial x^\lambda}} \sum_{k=1}^{n+k} \frac{\partial y^k}{\partial x^\mu} \frac{\partial}{\partial y^k}$$

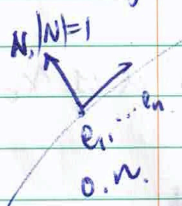
$$= \sum_{l,k=1}^{n+k} \frac{\partial y^k}{\partial x^\mu} \frac{\partial y^l}{\partial x^\lambda} \bar{\nabla}_{\frac{\partial}{\partial y^l}} \frac{\partial}{\partial y^k} + \sum_{p=1}^{n+k} \frac{\partial^2 y^p}{\partial x^\mu \partial x^\lambda} \frac{\partial}{\partial y^p}$$

$$= \sum_{l,p=1}^{n+k} \frac{\partial y^p}{\partial x^\mu} \frac{\partial y^l}{\partial x^\lambda} \bar{\Gamma}^s_{lp} \frac{\partial}{\partial y^s} + \sum_{p=1}^{n+k} \frac{\partial^2 y^p}{\partial x^\mu \partial x^\lambda} \frac{\partial}{\partial y^p}$$

at x_0, $\bar{\Gamma}^s_{lp} = 0$

then $\alpha\left(\frac{\partial}{\partial x^\mu}, \frac{\partial}{\partial x^\lambda}\right)_{x_0} = \sum_{p=n+1}^{n+k} \frac{\partial^2 y^p}{\partial x^\mu \partial x^\lambda} \frac{\partial}{\partial y^p} (x_0)$

- if we take



$M^n \hookrightarrow \bar{M}^{n+1}$

then $K(e_i, e_j) - \bar{K}(e_i, e_j) = \lambda$

$A_N e_i = \lambda_i e_i$

In particular, for $M^2 \hookrightarrow \mathbb{R}^3$

$K(e_1, e_2) = \lambda_1 \lambda_2$

Gauss curvature