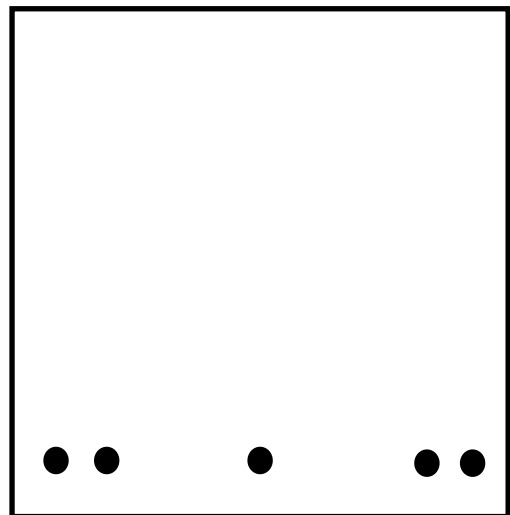


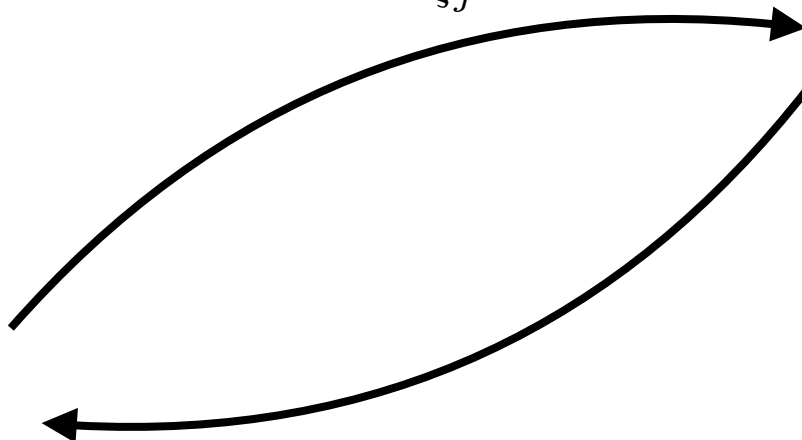
## StdRegions

 $\xi_2$  $\xi_1$ 

$$\vec{\xi} = (\xi_1, \xi_2)^T$$

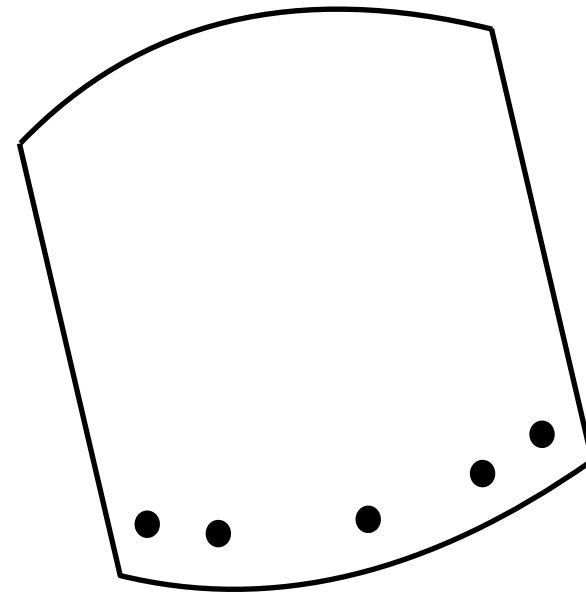
## SpatialDomains

$$\vec{x} = \chi(\vec{\xi})$$
$$\mathbf{J} = \frac{\partial x_i}{\partial \xi_j}$$



$$\vec{\xi} = \chi^{-1}(\vec{x})$$
$$\mathbf{J}^{-1} = \frac{\partial \xi_i}{\partial x_j}$$

## LocalRegions

 $x_2$  $x_1$ 

$$\vec{x} = (x_1, x_2)^T$$