

$$X^i =$$

$$f(x_1, \dots, x_n) = \left(\prod_{i=1}^n x_i \right)$$

$$\left(\frac{dX_1^1}{dx_1} \circ \Delta x_1 \right) \left(\frac{dX_2^1}{dx_2} \circ \Delta x_2 \right) \dots \dots \dots \frac{dX_n^n}{dx_n} \circ \Delta x_n =$$

$$= \left(\frac{X}{dx_1} \circ \Delta x_1 \right) \left(\frac{dX_2}{dx_2} \circ \Delta x_2 \right) \dots \dots \left(\frac{dX_n}{dx_n} \circ \Delta x_n \right) =$$

$$\Delta y = \prod_{i=1}^n \left(\frac{dX_i^{i-1}}{dx_i} \right) \Rightarrow \tilde{y} = \prod_{i=1}^n \left(\frac{dx_i^{i-1} \cdot \Delta x_i}{x_i^i} \right)$$

$$X^i = i x^{i-1}$$