

$$x^1 \cdots x^n \mathcal{V} = \underbrace{x^1 \cdots x^n \mathcal{V}^1 \cdots x^1 \cdots x^n \mathcal{V}^m}_{\mathfrak{h}}$$

$$\mathfrak{h} \xrightarrow[\text{diff}]{} \mathbb{R}$$

$$\underbrace{x^1 \cdots x^n \mathcal{V}^1 \cdots \mathcal{V}^m}_{d=2}$$

$$d = 2$$

$$\frac{\partial_x p \mid \partial_x q}{\partial_y p \mid \partial_y q} = \frac{\partial_x u \mid \partial_x v}{\partial_y u \mid \partial_y v} \frac{\partial_u p \mid \partial_u q}{\partial_v p \mid \partial_v q} = \frac{\partial_x u \partial_u p + \partial_x v \partial_v p \mid \partial_x u \partial_u q + \partial_x v \partial_v q}{\partial_y u \partial_u p + \partial_y v \partial_v p \mid \partial_y u \partial_u q + \partial_y v \partial_v q}$$