Aula 11 - 12.2/10
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• Determinante Jacobino: $J = \frac{\partial(u,v)}{\partial(x,y)} = \begin{vmatrix} \frac{\partial u}{\partial x} & \frac{\partial u}{\partial y} \\ \frac{\partial v}{\partial x} & \frac{\partial v}{\partial y} \end{vmatrix}$

• Derivadas parciais:

* $\frac{\partial u}{\partial x} = 1$ $\qquad \frac{\partial v}{\partial x} = -\frac{y}{x^2}$

* $\frac{\partial u}{\partial y} = 1$ $\qquad \frac{\partial v}{\partial y} = \frac{1}{x}$

• $J = \begin{vmatrix} 1 & 1 \\ -\frac{y}{x^2} & \frac{1}{x} \end{vmatrix} = 1 \cdot \frac{1}{x} - (1) \cdot \left(-\frac{y}{x^2}\right) = \frac{1}{x} + \frac{y}{x^2}$