

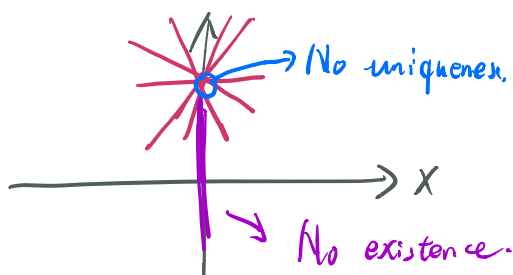
Example.

$$xy' = y - 1$$

$$\ln|1-y| = \ln|x| + C$$

$$\frac{dy}{1-y} = \frac{dx}{x}$$

$$y = 1 - Cx \quad \text{solution.}$$



存在且唯一性定理必须建立在微分方程写成标准形式的情况下

$$y' = f(x, y)$$

$$\frac{dy}{dx} = \left(\frac{1-y}{x} \right) \rightarrow \text{不连续, 导致定理失效.}$$