

Tangenten u. Normalen

$$y = f(x) \quad \text{geg. Curve}$$

$$\eta - y = \frac{dy}{dx}(\xi - x) \quad \text{Tg.} \quad (\text{TN-1})$$

$$\eta - y = -\frac{1}{\frac{dy}{dx}}(\xi - x) \quad \text{Norm.} \quad (\text{TN-2})$$

$$F(x, y) = 0 \quad \text{geg. Curve}$$

$$\frac{\partial F}{\partial x}(\xi - x) + \frac{\partial F}{\partial y}(\eta - y) = 0 \quad \text{Tang.} \quad (\text{TN-3})$$

$$\frac{\partial F}{\partial y}(\xi - x) - \frac{\partial F}{\partial x}(\eta - y) = 0 \quad \text{Norm.} \quad (\text{TN-4})$$

$$\left. \begin{array}{l} x = \varphi(t) \\ y = \psi(t) \end{array} \right\} \quad \text{geg. Curve}$$

$$\varphi'(t)(\eta - y) - \psi'(t)(\xi - x) = 0 \quad \text{Tang.} \quad (\text{TN-5})$$

$$\psi'(t)(\eta - y) + \varphi'(t)(\xi - x) = 0 \quad \text{Norm.} \quad (\text{TN-6})$$