Funkcija kompleksne spremenljivke $w = f(z)$:

$w = u(x, y) + iv(x, y)$

Odvod funkcije $w = f(z)$:

$$\frac{dw}{dz} = f'(z) = \lim_{\Delta z \to 0} \frac{f(z + \Delta z)}{\Delta z} = \frac{\partial u}{\partial x} + i\frac{\partial v}{\partial y}$$

Cauchy-Riemannovi formuli:

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

$$\frac{d(w_1 \pm w_2)}{dz} = \frac{dw_1}{dz} + \frac{dw_2}{dz}$$

$$\frac{d(w_1 w_2)}{dz} = w_1 w_2' + w_1' w_2$$

$$\frac{d(w_1 / w_2)}{dz} = \frac{w_1' w_2 - w_1 w_2'}{w_2^2}$$

$$\frac{dw^n}{dz} = n w^{n-1} \frac{dw}{dz}$$