$\phi = 1/(1 + E\text{^}(-\lambda))$

$\frac{1}{1+e^{-\lambda}}$

$D[\phi, \lambda]$

$\frac{e^{-\lambda}}{(1+e^{-\lambda})^2}$

$\text{Simplify}[D[1 - \phi, \lambda]]$

$-\frac{e^{\lambda}}{(1+e^{\lambda})^2}$

$\text{Simplify}[1 - \phi]$

$\frac{1}{1+e^{\lambda}}$

$D\left[\frac{1}{1+e^{\lambda}}, \lambda\right]$

$-\frac{e^{\lambda}}{(1+e^{\lambda})^2}$

$\phi = \Phi_1\Phi_2\Phi_3\Phi_4$

$\Phi_1\Phi_2\Phi_3\Phi_4$

$D\left[\phi, \Phi_2\right]$

$\Phi_1\Phi_3\Phi_4$

$\text{Clear}[\phi]$

$\lambda = \text{Log}[\phi/(1 - \phi)]$

$\text{Log}\left[\frac{\phi}{1-\phi}\right]$

$\text{Simplify}[D[\lambda, \phi]]$

$\frac{1}{\phi-\phi^2}$