

Definition	Transformation
$c_v = \left(\frac{\partial u}{\partial T}\right)_v$	$= \left(\frac{\partial u}{\partial T}\right)_\varrho$
$\left(\frac{\partial \varrho}{\partial p}\right)_T$	$= \left(\frac{\partial p}{\partial \varrho}\right)_T^{-1}$
$\delta_T = \left(\frac{\partial h}{\partial p}\right)_T$	$= \left(\frac{\partial h}{\partial \varrho}\right)_T \left(\frac{\partial p}{\partial \varrho}\right)_T^{-1}$
$\left(\frac{\partial \varrho}{\partial T}\right)_p$	$= -\left(\frac{\partial p}{\partial T}\right)_\varrho \left(\frac{\partial p}{\partial \varrho}\right)_T^{-1}$
$c_p = \left(\frac{\partial h}{\partial T}\right)_p$	$= \left(\frac{\partial h}{\partial T}\right)_\varrho - \left(\frac{\partial h}{\partial \varrho}\right)_T \left(\frac{\partial p}{\partial T}\right)_\varrho \left(\frac{\partial p}{\partial \varrho}\right)_T^{-1}$
$w^2 = \left(\frac{\partial p}{\partial \varrho}\right)_s$	$= \left(\frac{\partial p}{\partial \varrho}\right)_T - \left(\frac{\partial p}{\partial T}\right)_\varrho \left(\frac{\partial s}{\partial \varrho}\right)_T \left(\frac{\partial s}{\partial T}\right)_\varrho^{-1}$
$\mu = \left(\frac{\partial T}{\partial p}\right)_h$	$= \left[\left(\frac{\partial p}{\partial T}\right)_\varrho - \left(\frac{\partial p}{\partial \varrho}\right)_T \left(\frac{\partial h}{\partial T}\right)_\varrho \left(\frac{\partial h}{\partial \varrho}\right)_T^{-1}\right]^{-1}$
$\left(\frac{\partial T}{\partial h}\right)_p$	$= \left[\left(\frac{\partial h}{\partial T}\right)_\varrho - \left(\frac{\partial h}{\partial \varrho}\right)_T \left(\frac{\partial p}{\partial T}\right)_\varrho \left(\frac{\partial p}{\partial \varrho}\right)_T^{-1}\right]^{-1}$
$\left(\frac{\partial \varrho}{\partial p}\right)_h$	$= \left[\left(\frac{\partial p}{\partial \varrho}\right)_T - \left(\frac{\partial p}{\partial T}\right)_\varrho \left(\frac{\partial h}{\partial \varrho}\right)_T \left(\frac{\partial h}{\partial T}\right)_\varrho^{-1}\right]^{-1}$
$\left(\frac{\partial \varrho}{\partial h}\right)_p$	$= \left[\left(\frac{\partial h}{\partial \varrho}\right)_T - \left(\frac{\partial h}{\partial T}\right)_\varrho \left(\frac{\partial p}{\partial \varrho}\right)_T \left(\frac{\partial p}{\partial T}\right)_\varrho^{-1}\right]^{-1}$