

~~Før nå ikke $T = \frac{P_{\text{ref}}}{P_i} = \frac{4 \sqrt{\rho_1 \rho_2}}{(\sqrt{\rho_1} + \sqrt{\rho_2})^2}$~~

* her
 * Må bruke at $B \cdot \partial \psi / \partial x$ er kontinuerlig i $x=0$:

$$\Rightarrow B_1 k_i \psi_{i0} + B_1 k_i \psi_{r0} = B_2 k_t \psi_{t0}$$

så kombinert med $\psi_{i0} - \psi_{r0} = \psi_{t0}$ (kontinuitet av ψ)
 gir

$$\psi_{r0} = \frac{\sqrt{\rho_2 B_2} - \sqrt{\rho_1 B_1}}{\sqrt{\rho_2 B_2} + \sqrt{\rho_1 B_1}} \psi_{i0}$$

$$\psi_{t0} = \frac{2 \sqrt{\rho_1 B_1}}{\sqrt{\rho_2 B_2} + \sqrt{\rho_1 B_1}} \psi_{i0}$$

$$\Rightarrow T = \frac{v_2 \rho_2}{v_1 \rho_1} \left(\frac{\psi_{t0}}{\psi_{i0}} \right)^2 = \frac{\sqrt{\rho_2 B_2}}{\sqrt{\rho_1 B_1}} \cdot \frac{4 \rho_1 B_1}{(\sqrt{\rho_2 B_2} + \sqrt{\rho_1 B_1})^2}$$

$$= \frac{4 \sqrt{\rho_1 B_1 \rho_2 B_2}}{(\sqrt{\rho_2 B_2} + \sqrt{\rho_1 B_1})^2}$$

$$\Rightarrow T + R = 1$$

(OK!)

$$\text{Så } R = \dots = \frac{(\sqrt{\rho_2 B_2} - \sqrt{\rho_1 B_1})^2}{(\sqrt{\rho_2 B_2} + \sqrt{\rho_1 B_1})^2}$$