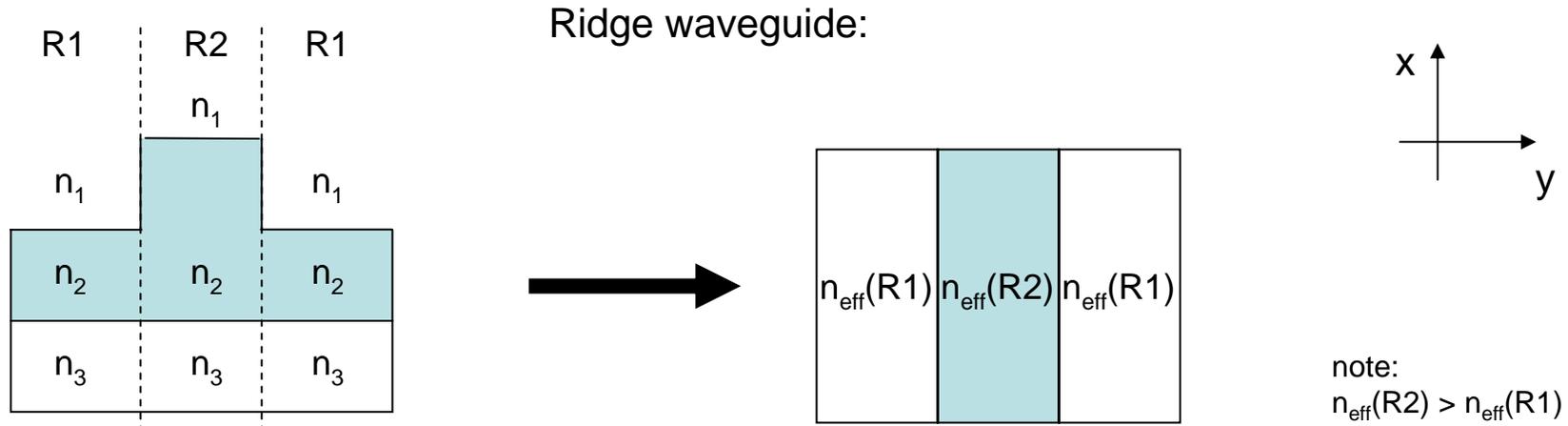


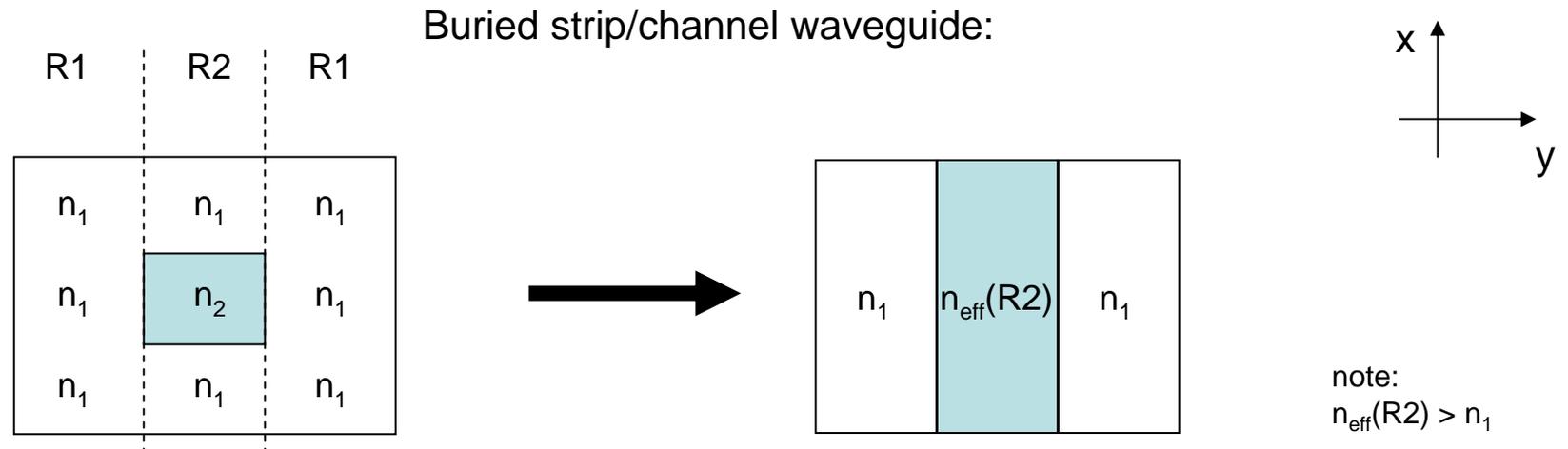
2D Approximation for Waveguide Effective Refractive Index n_{eff}



note:
 $n_{\text{eff}}(\text{R2}) > n_{\text{eff}}(\text{R1})$

(1) 3 asymmetric 1D waveguide problems in x-direction. Solve for n_{eff} in regions R1, R2.

(2) 1 symmetric 1D waveguide problem in y-direction. Solve for a new n_{eff} ; this your 2D solution.



note:
 $n_{\text{eff}}(\text{R2}) > n_1$

(1) 1 symmetric 1D waveguide problem in x-direction. Solve for n_{eff} in region R2.

(2) 1 symmetric 1D waveguide problem in y-direction. Solve for a new n_{eff} ; this your 2D solution.