

Homework 1 (**Due on Oct. 15**):

1. Consider two planar waveguides shown in below: the first one has $n_f=3.5$, $n_c=1$, and $n_s=1.5$, $h=5\mu\text{m}$; the second one has $n_f=2$, $n_c=1$, and $n_s=1.5$, $h=5\mu\text{m}$. Calculate and plot the propagation constants, effective indices, and all the guiding mode profiles of TE and TM polarizations for both these two waveguides. You can use the software you learned in class or any software you like.

