Answers to Problems Set 2

Problem 1. $$\Gamma = \frac{\eta^2 - \eta_0^2}{\eta^2 + \eta_0^2}$$

Problem 2.

(a) $\approx 0.0653 np - m^{-1}$

(b) $\approx 15.3 m$

(c) $\approx -0.00567 dB$

$\approx -0.567 dB$

Problem 3. $$\alpha = \frac{\pi f \sqrt{2\delta'_r}}{c}\left[\sqrt{1 + tan^2\,\delta_c} - 1\right]^{1/2}$$

Problem 4. Follow example in lecture notes. Apply B.C.