

20. Sample Problem 18-5 shows that a decibel difference $\Delta\beta$ is directly related to an intensity ratio (which we write as $\mathcal{R} = I'/I$). Thus,

$$\Delta\beta = 10 \log(\mathcal{R}) \implies \mathcal{R} = 10^{\Delta\beta/10} = 10^{0.1} = 1.26 .$$