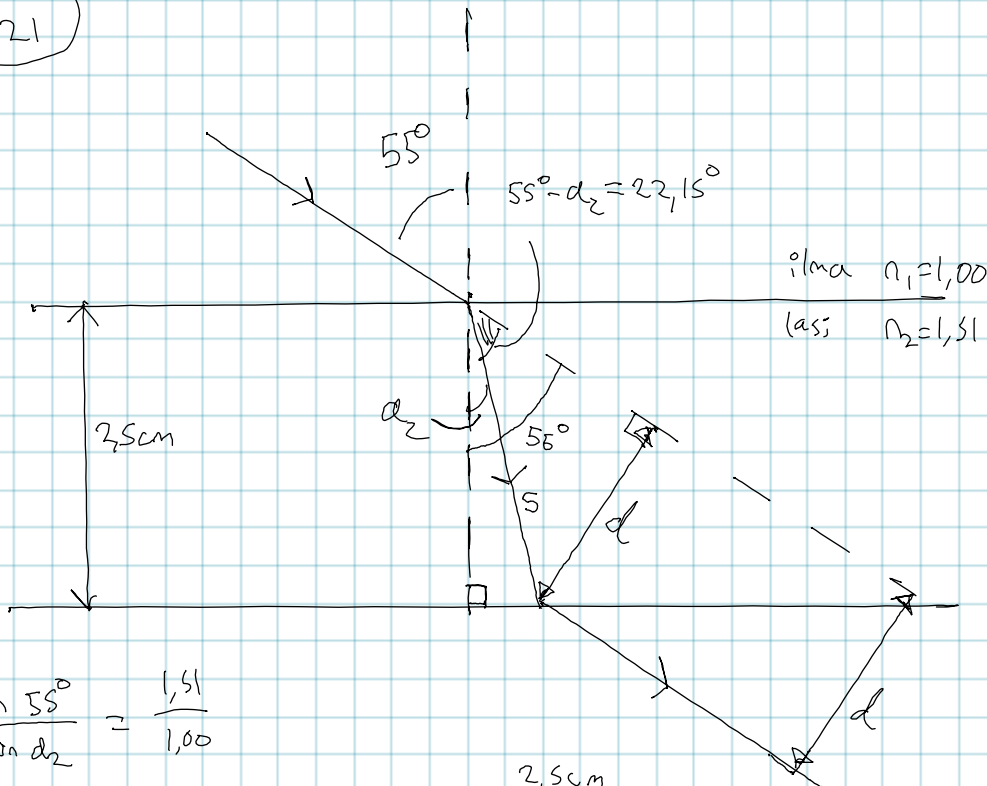


$$\frac{\lambda_{\text{ilma}}}{\lambda_{\text{lasi}}} = \frac{n_{\text{lasi}}}{n_{\text{ilma}}}$$

$$\lambda_{\text{lasi}} = \frac{\lambda_{\text{ilma}} \cdot n_{\text{ilma}}}{n_{\text{lasi}}} = \frac{450 \text{ nm} \cdot 1,00}{1,5}$$

$$\lambda_{\text{lasi}} \approx \underline{\underline{300 \text{ nm}}}$$

T3-21



$$\frac{\sin 55^\circ}{\sin d_2} = \frac{1,51}{1,00}$$

$$\sin d_2 = \frac{1,00 \cdot \sin 55^\circ}{1,51}$$

$$d_2 \approx 32,85^\circ$$

$$\cos d_2 = \frac{2,5 \text{ cm}}{s}$$

$$s = \frac{2,5 \text{ cm}}{\cos 32,85^\circ}$$

$$s \approx \underline{\underline{2,9759 \text{ cm}}}$$

$$\sin(55^\circ - d_2) = \frac{d}{s}$$

$$d = \sin 22,15^\circ \cdot 2,9759 \text{ cm}$$

$$d \approx 1,12 \text{ cm}$$

$$\underline{\underline{\text{Vastaus: } 1,1 \text{ cm}}}$$