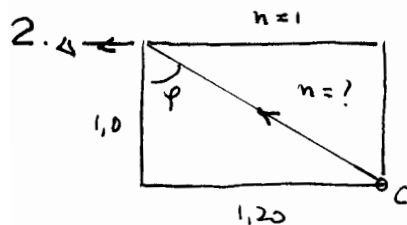


$$1. a) \quad \lambda_1 n_1 = \lambda_2 n_2 \quad \rightarrow \quad 1,33 \cdot 450 = n_2 \cdot 411$$

$$\therefore n = \frac{1,33 \cdot 450}{411} = 1,46 \quad \text{tetracloruro.}$$

$$b) \quad \lambda_0 = 1,46 \cdot 411 = 600 \text{ nm}$$



$$\tan \varphi = \frac{1,20}{1,0} = 1,2 \quad \rightarrow \quad \sin \varphi = \frac{\tan \varphi}{\sqrt{1 + \tan^2 \varphi}}$$

$$n \sin \varphi = 1 \cdot \sin 90^\circ$$

$$\therefore n = \frac{1}{\sin \varphi} = \frac{\sqrt{1 + \tan^2 \varphi}}{\tan \varphi} = \frac{\sqrt{1 + 1,2^2}}{1,2} = 1,3$$

$$n [\sin(\arctan 1,2)]^{-1} = 1,3$$