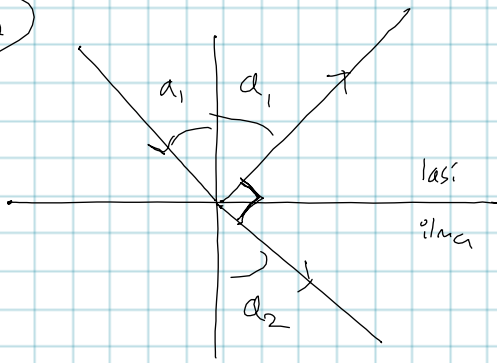


13-67



a) $\alpha_1 = 57^\circ$
 $\alpha_1 + \alpha_2 = 90^\circ$
 $\alpha_2 = 90^\circ - 57^\circ$
 $\alpha_2 = 33^\circ$

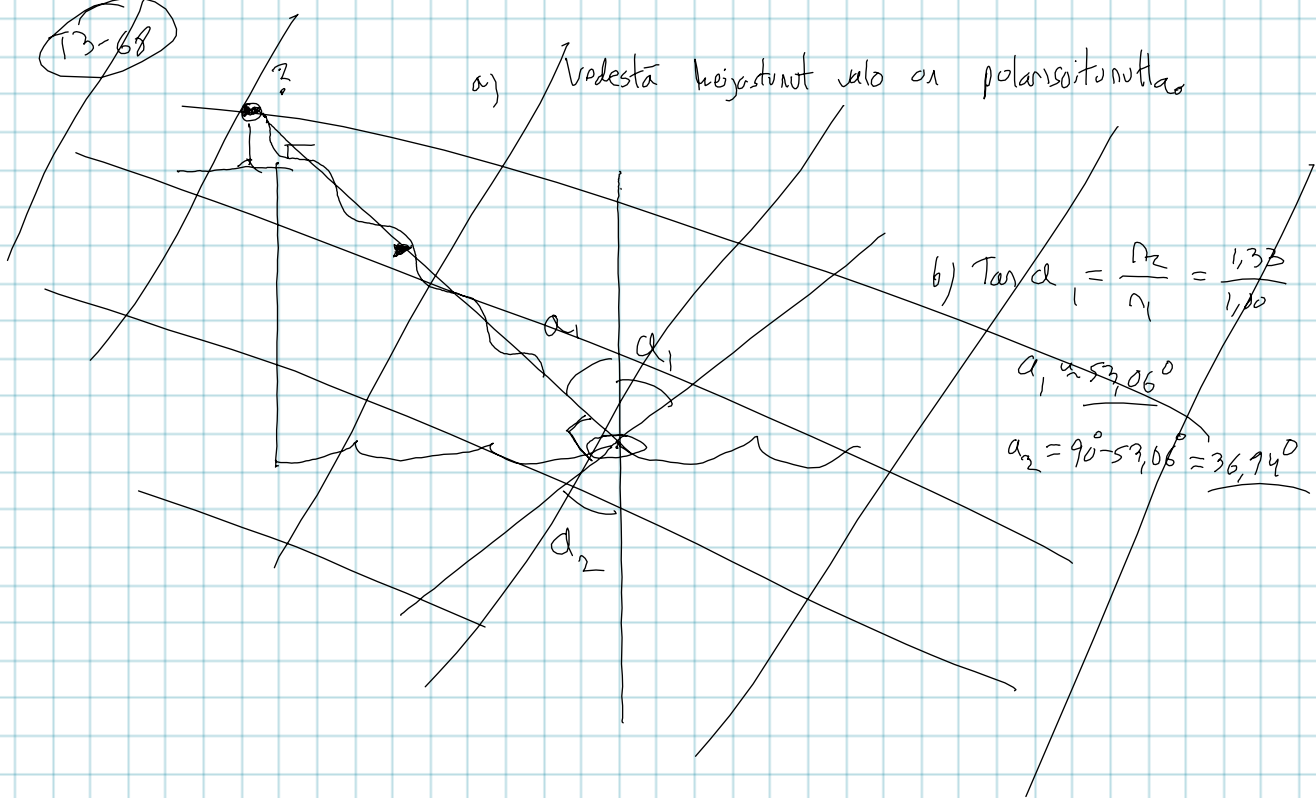
c) $c_2 = \frac{c}{n_2} = \frac{2,998 \cdot 10^8 \text{ m/s}}{1,54}$

$c_2 \approx 1,9 \cdot 10^8 \text{ m/s}$

b) $\tan \alpha_1 = \frac{n_2}{n_1}$

$n_2 = n_1 \cdot \tan \alpha_1 = 1,00 \cdot \tan 57^\circ \approx 1,5$

13-68



a) Vasesta heijastunut valo on polarisoitunutta

b) $\tan \alpha_1 = \frac{n_2}{n_1} = \frac{1,33}{1,00}$

$\alpha_1 = 53,06^\circ$

$\alpha_2 = 90^\circ - 53,06^\circ = 36,94^\circ$