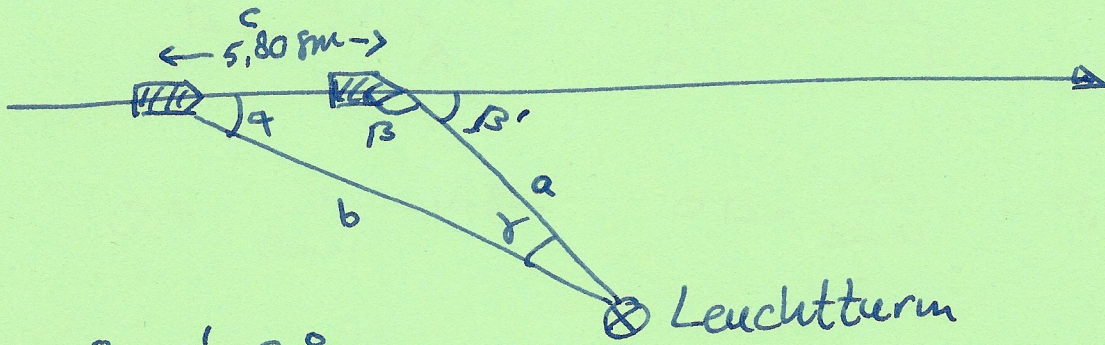


6.64

$18m = 1,852 km$
 $5,808m = 10.74 km$



$\alpha = 35^\circ$
 $\beta' = 61^\circ$
 $\beta = 180^\circ - 61^\circ = 119^\circ$
 $\gamma = \beta' - \alpha = 61 - 35 = 26^\circ$

1) a wird gesucht $\frac{a}{\sin \alpha} = \frac{c}{\sin \gamma} \Rightarrow a = \frac{\sin \alpha}{\sin \gamma} \cdot c$

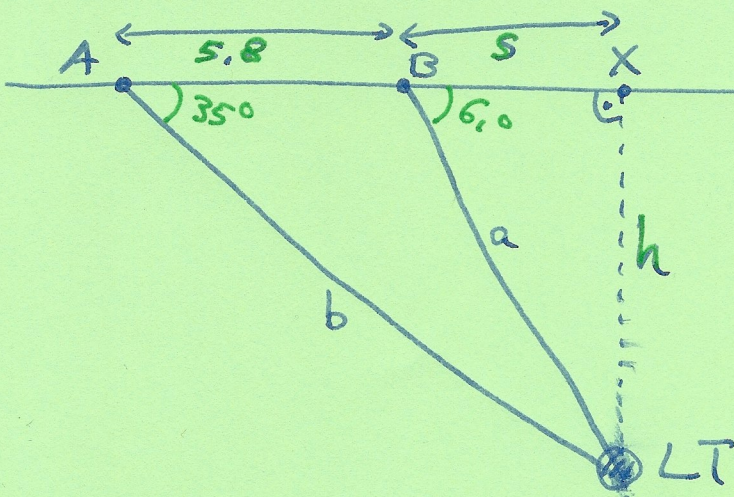
daher $a = \frac{\sin(35^\circ)}{\sin(26^\circ)} \cdot 5,8 = 7,68m$

2) b-a ist gefragt.

$b = \frac{\sin(\beta)}{\sin(\gamma)} \cdot c = \frac{\sin(119^\circ)}{\sin(26^\circ)} \cdot 5,8 = 11,68m$

$b-a = 48m$

Andere Methode



$h = s \cdot \tan 61^\circ$
 $h = (s+5,8) \cdot \tan 35^\circ$
 $s \cdot \tan 61^\circ = (s+5,8) \cdot \tan 35^\circ$
 $\Rightarrow s = 3,78m$
 $h = 6,78m$
 $a = \frac{s}{\cos 61^\circ} = 7,68m$