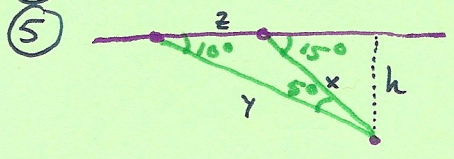
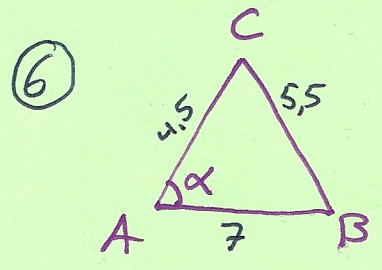


- ① Richtig: nr. 1 nur 1.
- ② 1R, 2R, 3R, 4F, 5F, 6R
- ③ Richtig nr. 3
- ④ Siehe Gruppe A

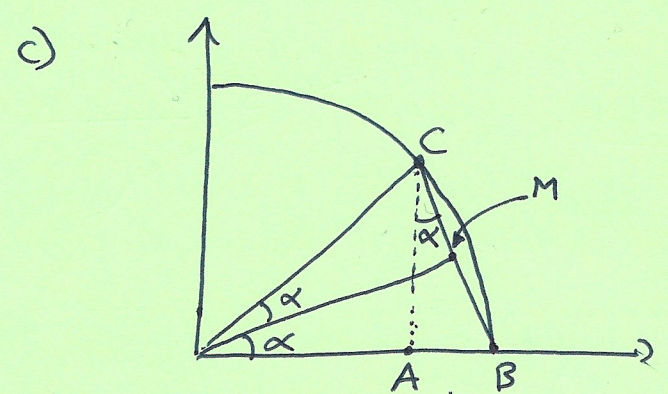


a) $z = \frac{1}{3} \cdot 600 \text{ km} = 200 \text{ km}$
 $\frac{x}{\sin 10^\circ} = \frac{z}{\sin 5^\circ} \Rightarrow x = \frac{\sin 10^\circ \cdot 200}{\sin 5^\circ} \approx 398 \text{ km}$
 b) $h = x \cdot \sin 15^\circ = 103 \text{ km}$ (bissl hoch... Baumgartner)

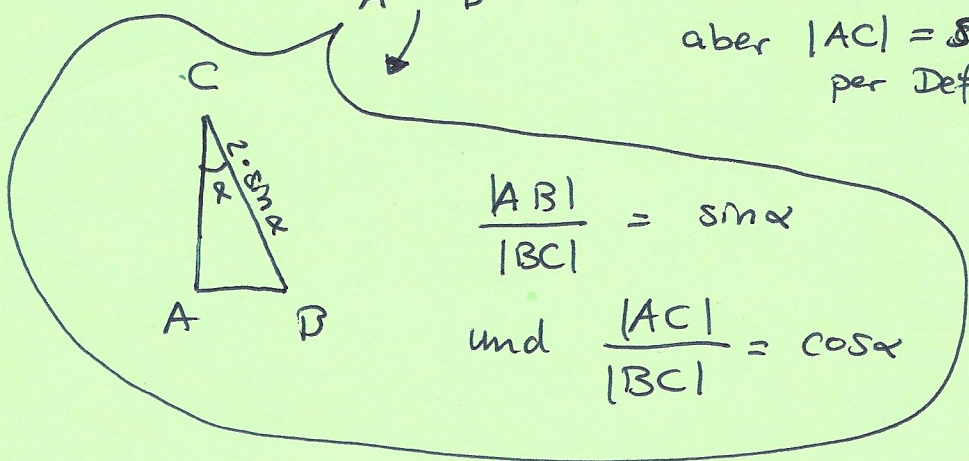


Kosinussatz
 $(5,5)^2 = 7^2 + (4,5)^2 - 2 \cdot 4,5 \cdot 7 \cdot \cos \alpha$
 $30,25 = 69,25 - 63 \cdot \cos \alpha$
 $\cos \alpha = \frac{69,25 - 30,25}{63} = 0,619 \dots \Rightarrow \alpha = 51,75^\circ$

- ⑦ a) & b) Siehe Gruppe A



In $\triangle ABC$:
 $(|AB| = |BC| \cdot \sin \alpha = 2 \sin^2 \alpha)$
 und:
 $|AC| = |BC| \cdot \cos \alpha = 2 \cdot \sin \alpha \cdot \cos \alpha$
 aber $|AC| = \sin 2\alpha$
 per Definitionem



- ⑧ Auf anderem Blatt.