

# Lösungen der Aufgaben vom 1. AB.

- a) gemessen;  $\alpha = 56^\circ$   
 $\beta = 34^\circ$   
 $AB = 11,8 \text{ cm}$   
 $AC = 6,6 \text{ cm}$   
 $BC = 9,8 \text{ cm}$

b)

$$\frac{a}{b} = \frac{BC}{AC} = \frac{9,8 \text{ cm}}{6,6 \text{ cm}} = 1,48$$

$$\frac{a}{c} = \frac{BC}{AB} = \frac{9,8 \text{ cm}}{11,8 \text{ cm}} = 0,83$$

$$\frac{b}{a} = \frac{AC}{BC} = \frac{6,6 \text{ cm}}{9,8 \text{ cm}} = 0,67$$

$$\frac{b}{c} = \frac{AC}{AB} = \frac{6,6 \text{ cm}}{11,8 \text{ cm}} = 0,56$$

c)

$$\sin \alpha = \sin 56^\circ = 0,829$$

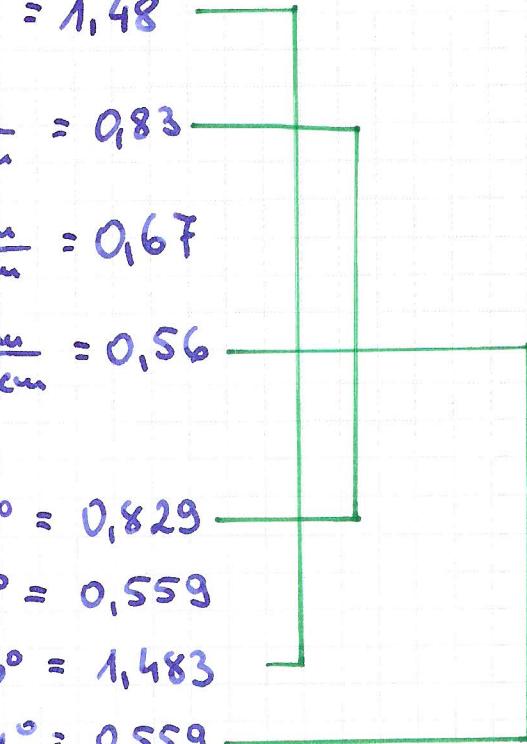
$$\cos \alpha = \cos 56^\circ = 0,559$$

$$\tan \alpha = \tan 56^\circ = 1,483$$

$$\sin \beta = \sin 34^\circ = 0,559$$

$$\cos \beta = \cos 34^\circ = 0,829$$

$$\tan \beta = \tan 34^\circ = 0,675$$



2.

a)  $\sin \alpha = \frac{t}{s}$

$\cos \alpha = \frac{s}{r}$

$\tan \alpha = \frac{t}{r}$

c)  $\tan \alpha = \frac{r}{s}$

$\sin \alpha = \frac{r}{m}$

$\cos \alpha = \frac{s}{m}$

b)  $\sin \alpha = \frac{t}{x}$

$\cos \alpha = \frac{x}{r}$

$\tan \alpha = \frac{t}{r}$

d)  $\cos \alpha = \frac{k}{w}$

$\tan \alpha = \frac{t}{k}$

$\sin \alpha = \frac{t}{w}$

3.

a)  $\tan \alpha = \frac{w}{b}$

$\cos \alpha = \frac{b}{r}$

b)  $\sin \alpha = \frac{r}{k}$

$\cos \alpha = \frac{s}{k}$

c)  $\tan \alpha = \frac{c}{s}$

$\sin \alpha = \frac{c}{m}$