# Lösungen der Aufgaben vom 1. AB.

a) gemessen:

$\alpha = 56°$

$\beta = 34°$

$AB = 11{,}8\ cm$

$AC = 6{,}6\ cm$

$BC = 9{,}8\ cm$

b)

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

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

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

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

c)

$\sin\alpha = \sin 56° = 0{,}829$

$\cos\alpha = \cos 56° = 0{,}559$

$\tan\alpha = \tan 56° = 1{,}483$

$\sin\beta = \sin 34° = 0{,}559$

$\cos\beta = \cos 34° = 0{,}829$

$\tan\beta = \tan 34° = 0{,}675$

2.

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

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

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

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

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

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

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

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

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

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

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

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

3.

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

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

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

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

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

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