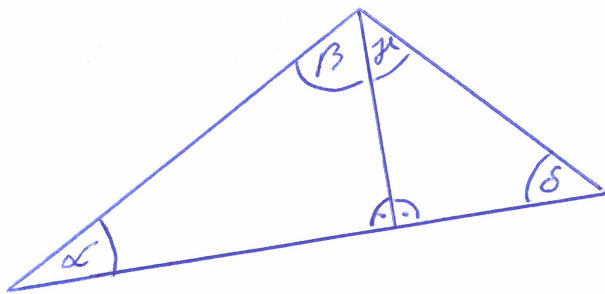


Übungsbeispiele zu Winkel funktoren im rechtwinkligen Dreieck



Merke: $\sin \alpha = \frac{GK}{HYP}$

$\cos \alpha = \frac{AK}{HYP}$

$\tan \alpha = \frac{GK}{AK}$

Statt α kann man auch $\beta, \beta', \delta, \dots$ einsetzen

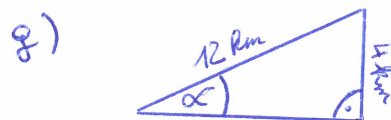
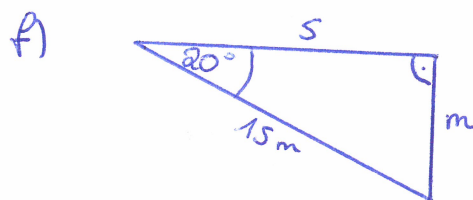
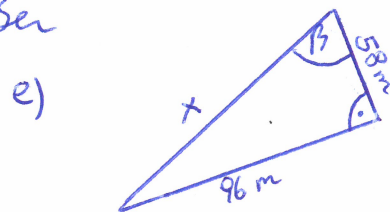
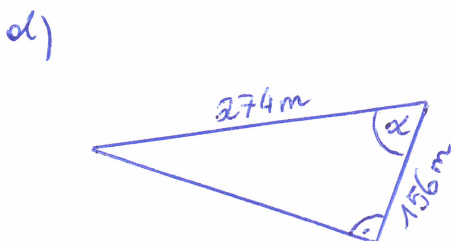
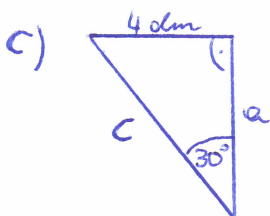
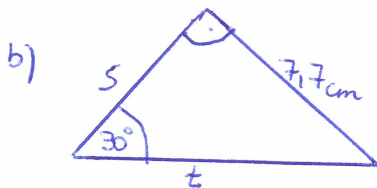
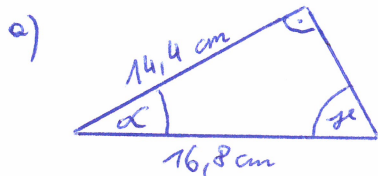
GK = Gegenkathete (gegenüber von $\alpha, \beta, \beta', \dots$)

AK = Ankathete

HYP = Hypotenuse (längste Seite im Δ)

- 1)
- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| $\sin \alpha = \frac{\quad}{\quad}$ | $\cos \delta = \frac{\quad}{\quad}$ | $\cos \beta = \frac{\quad}{\quad}$ | $\tan \beta = \frac{\quad}{\quad}$ |
| $\sin \beta = \frac{\quad}{\quad}$ | $\cos \alpha = \frac{\quad}{\quad}$ | $\cos \delta = \frac{\quad}{\quad}$ | $\tan \beta = \frac{\quad}{\quad}$ |
| $\sin \beta = \frac{\quad}{\quad}$ | $\cos \beta = \frac{\quad}{\quad}$ | $\tan \alpha = \frac{\quad}{\quad}$ | $\tan \delta = \frac{\quad}{\quad}$ |

2.) Berechne die unbekannteren Größen



3.) Markiere bei allen Dreiecken die Ankathete (grün) und die Gegenkathete (rot) von einem beliebigen Winkel. Diesen Winkel markierst du auch.