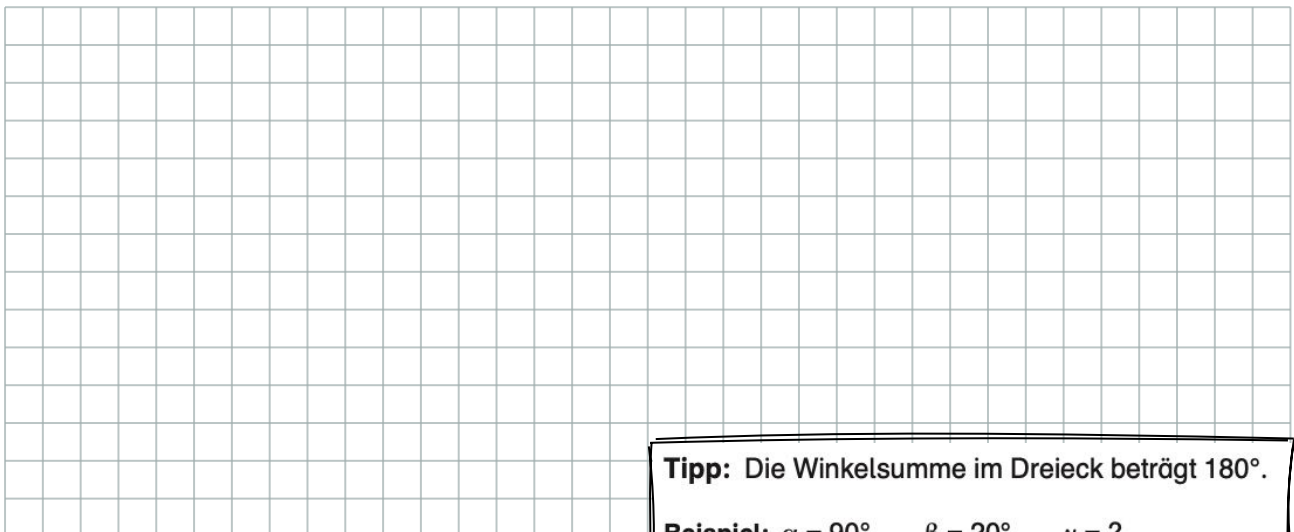
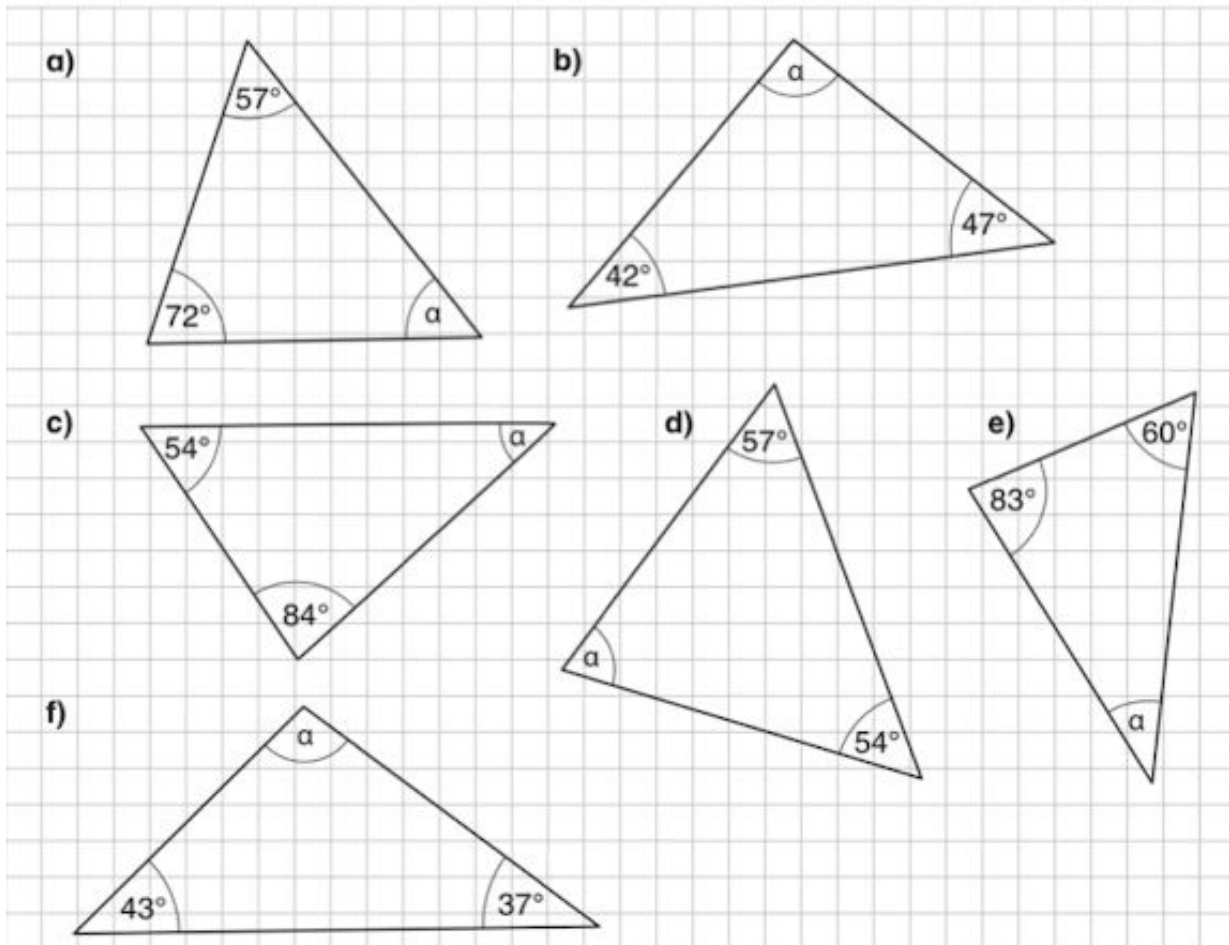


ÜB: Innenwinkelsumme im Dreieck

Mathematik Raum und Form M 7

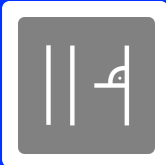
① Berechne die fehlenden Winkelgrößen.



Tipp: Die Winkelsumme im Dreieck beträgt 180° .

Beispiel: $\alpha = 90^\circ$ $\beta = 20^\circ$ $\gamma = ?$
 $180^\circ - 90^\circ - 20^\circ = \underline{70^\circ}$





ÜB: Innenwinkelsumme im Dreieck

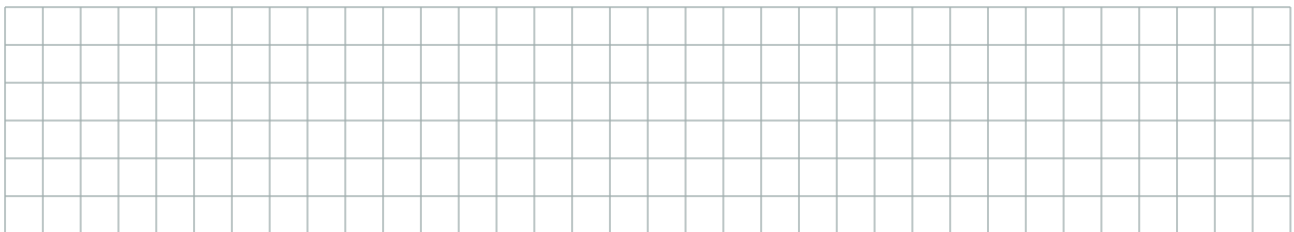
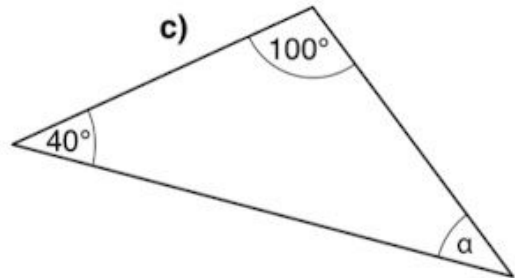
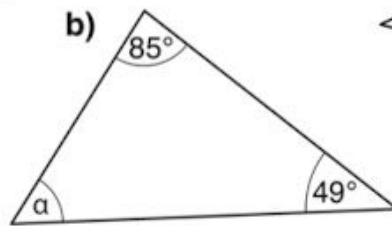
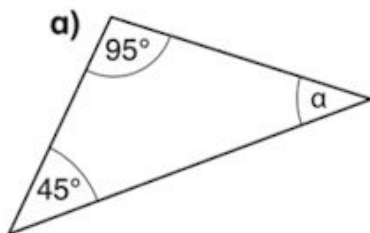
Mathematik Raum und Form M 7

Tipp: Die Winkelsumme im Dreieck beträgt 180° .

Beispiel: $\alpha = 90^\circ$ $\beta = 20^\circ$ $\gamma = ?$

$$180^\circ - 90^\circ - 20^\circ = \underline{70^\circ}$$

② Berechne die fehlenden Winkelgrößen.



③ Berechne jeweils die fehlende Winkelgröße.

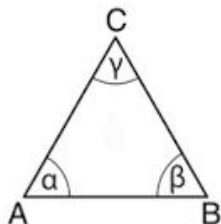
a) $\alpha = 80^\circ$; $\gamma = 60^\circ$ _____

c) $\alpha = 90^\circ$; $\beta = 70^\circ$ _____

b) $\beta = 30^\circ$; $\gamma = 50^\circ$ _____

d) $\alpha = 100^\circ$; $\gamma = 35^\circ$ _____

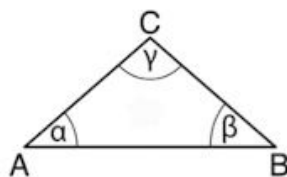
④ Überlege dir eigene Beispiele für die Winkel, sodass immer eine Innenwinkelsumme von 180° herauskommt.



$\alpha =$ _____

$\beta =$ _____

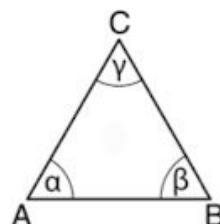
$\gamma =$ _____



$\alpha =$ _____

$\beta =$ _____

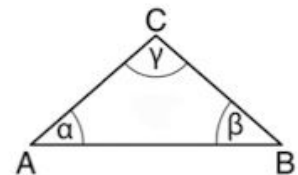
$\gamma =$ _____



$\alpha =$ _____

$\beta =$ _____

$\gamma =$ _____

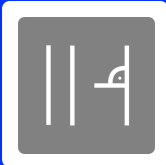


$\alpha =$ _____

$\beta =$ _____

$\gamma =$ _____





ÜB: Innenwinkelsumme im Dreieck

Mathematik Raum und Form M 7

⑤ Berechne die Größe des fehlenden Winkels im Dreieck.

- | | | |
|------------------------|----------------------|------------------|
| ① $\gamma = 45^\circ$ | $\beta = 70^\circ$ | $\alpha =$ _____ |
| ② $\gamma = 56^\circ$ | $\beta = 100^\circ$ | $\alpha =$ _____ |
| ③ $\alpha = 80^\circ$ | $\beta = 60^\circ$ | $\gamma =$ _____ |
| ④ $\alpha = 110^\circ$ | $\gamma = 45^\circ$ | $\beta =$ _____ |
| ⑤ $\beta = 43^\circ$ | $\alpha = 97^\circ$ | $\gamma =$ _____ |
| ⑥ $\beta = 22^\circ$ | $\gamma = 76^\circ$ | $\alpha =$ _____ |
| ⑦ $\alpha = 68^\circ$ | $\beta = 102^\circ$ | $\gamma =$ _____ |
| ⑧ $\gamma = 38^\circ$ | $\alpha = 102^\circ$ | $\beta =$ _____ |

E 40°

C 82°

D 65°

K 10°

E 40°

R 24°

I 25°

E 40°

Lösungswort:

①	②	③	④	⑤	⑥	⑦	⑧

Tipp: Die Winkelsumme im Dreieck beträgt 180°.

Beispiel: $\alpha = 90^\circ$ $\beta = 20^\circ$ $\gamma = ?$
 $180^\circ - 90^\circ - 20^\circ = 70^\circ$

