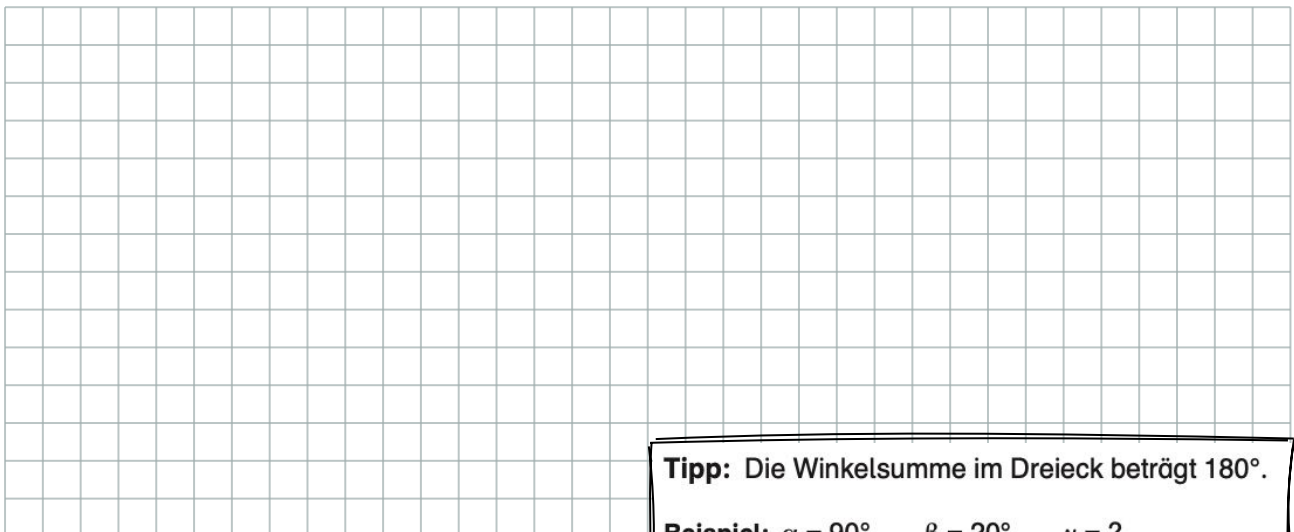
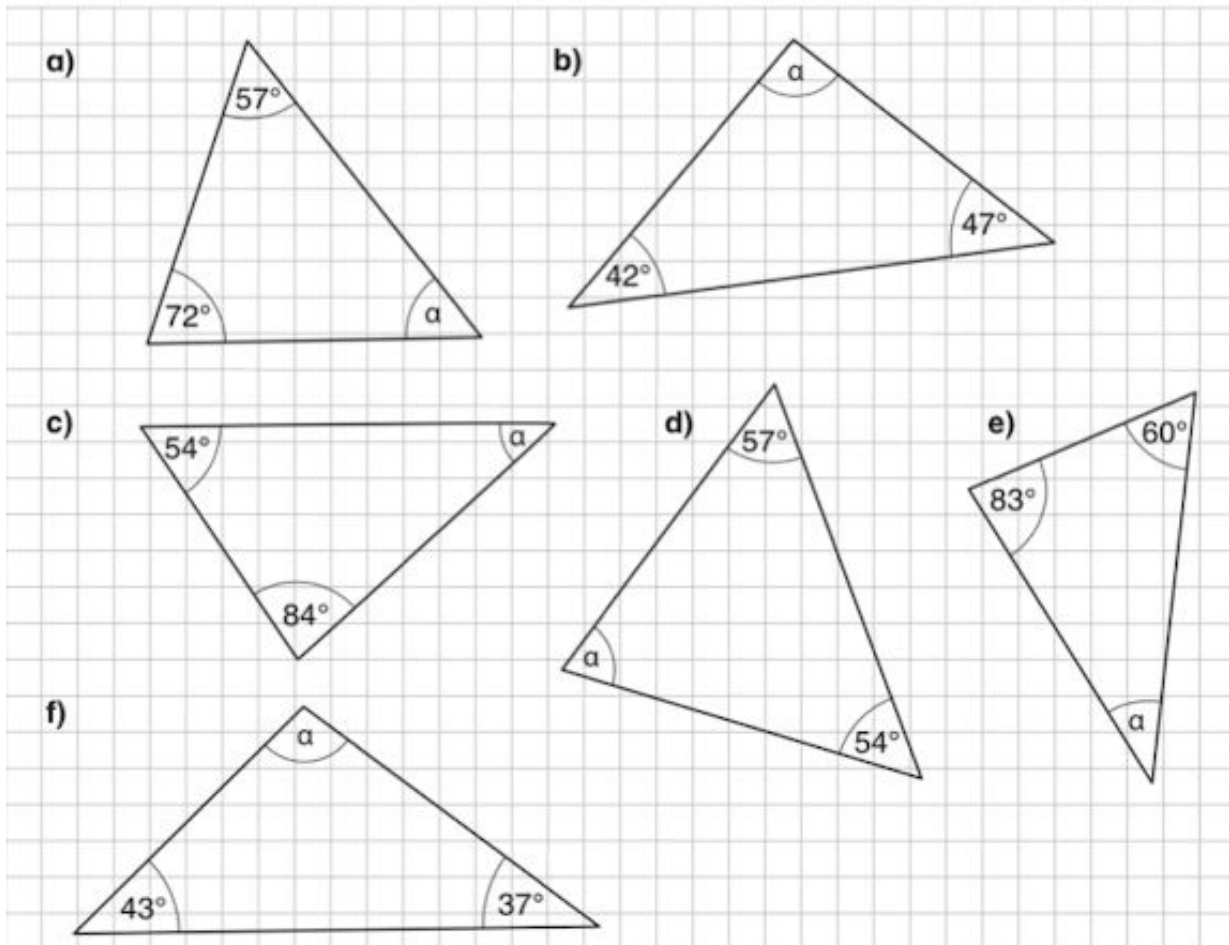


# ÜB: Innenwinkelsumme im Dreieck

Mathematik Raum und Form M 7

① Berechne die fehlenden Winkelgrößen.



**Tipp:** Die Winkelsumme im Dreieck beträgt  $180^\circ$ .

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





# ÜB: Innenwinkelsumme im Dreieck

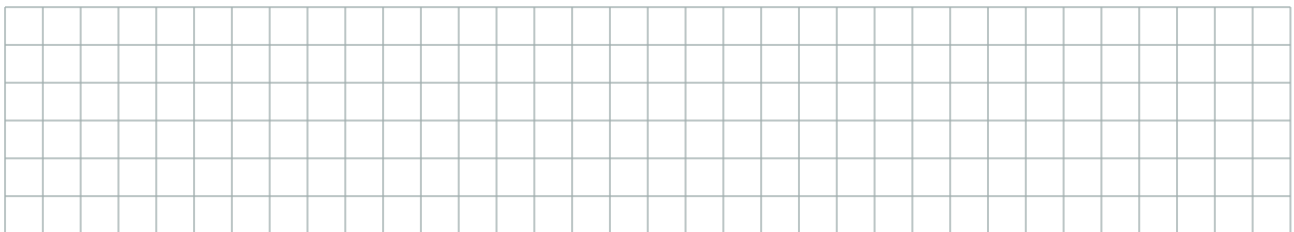
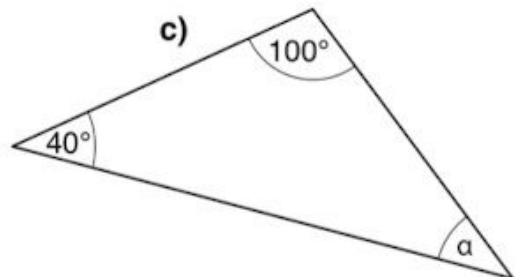
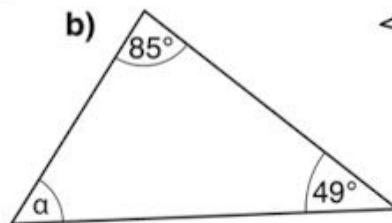
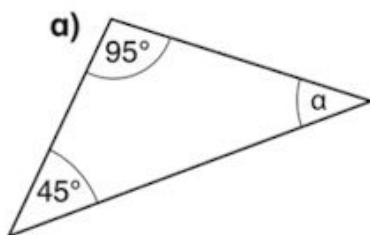
Mathematik Raum und Form M 7

**Tipp:** Die Winkelsumme im Dreieck beträgt  $180^\circ$ .

**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.

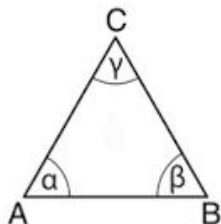
a)  $\alpha = 80^\circ$ ;  $\gamma = 60^\circ$  \_\_\_\_\_

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

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

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

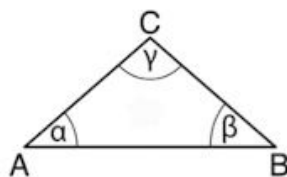
- ④ Überlege dir eigene Beispiele für die Winkel, sodass immer eine Innenwinkelsumme von  $180^\circ$  herauskommt.



$\alpha =$  \_\_\_\_\_

$\beta =$  \_\_\_\_\_

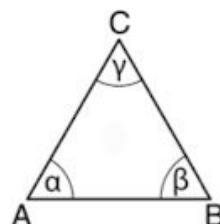
$\gamma =$  \_\_\_\_\_



$\alpha =$  \_\_\_\_\_

$\beta =$  \_\_\_\_\_

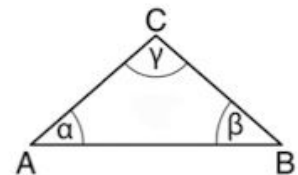
$\gamma =$  \_\_\_\_\_



$\alpha =$  \_\_\_\_\_

$\beta =$  \_\_\_\_\_

$\gamma =$  \_\_\_\_\_

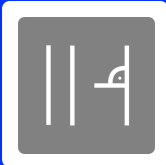


$\alpha =$  \_\_\_\_\_

$\beta =$  \_\_\_\_\_

$\gamma =$  \_\_\_\_\_





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

