

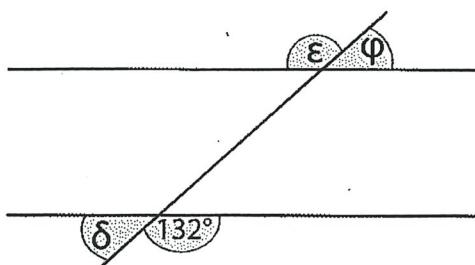
4.4 Winkelarten

4

Bestimme die fehlenden Winkel! Bemalte die Lösungen im Lösungsfeld, du erhältst ein Muster!

Einige Lösungen sind mehrmals anzumalen!

a)

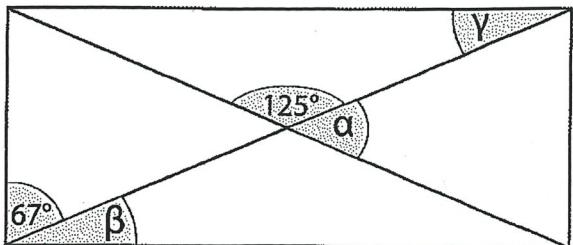


$$\varepsilon = 132^\circ$$

$$\varphi = 48^\circ$$

$$\delta = 48^\circ$$

b)

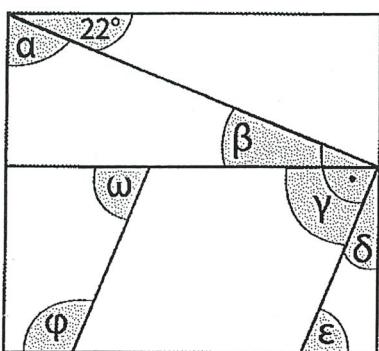


$$\alpha = 55^\circ$$

$$\beta = 23^\circ$$

$$\gamma = 23^\circ$$

c)



$$\alpha = 68^\circ$$

$$\beta = 22^\circ$$

$$\gamma = 68^\circ$$

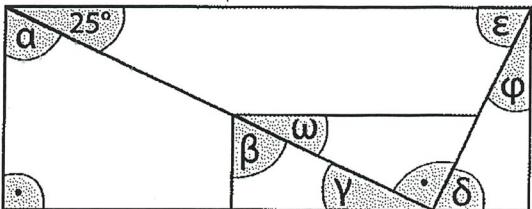
$$\delta = 22^\circ$$

$$\varepsilon = 68^\circ$$

$$\varphi = 112^\circ$$

$$\omega = 68^\circ$$

d)



$$\alpha = 65^\circ$$

$$\beta = 65^\circ$$

$$\gamma = 25^\circ$$

$$\delta = 65^\circ$$

$$\varepsilon = 65^\circ$$

$$\varphi = 25^\circ$$

$$\omega = 25^\circ$$

112°	75°	115°	48°	47°	38°	65°
66°	22°	43°	132°	43°	23°	142°
43°	47°	68°	65°	65°	52°	75°
24°	114°	25°	75°	22°	115°	38°
66°	142°	65°	55°	68°	24°	115°
24°	25°	38°	68°	114°	23°	52°
68°	114°	52°	48°	47°	66°	25°