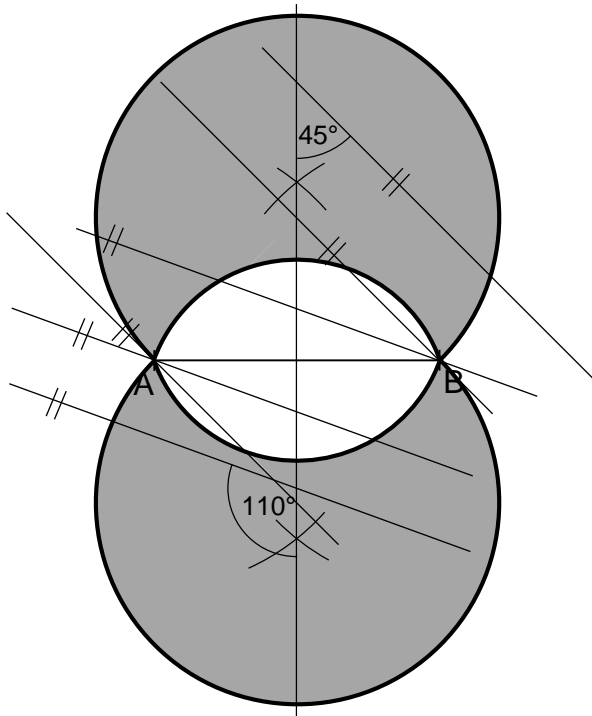


## Zusatzaufgaben – Lösungen

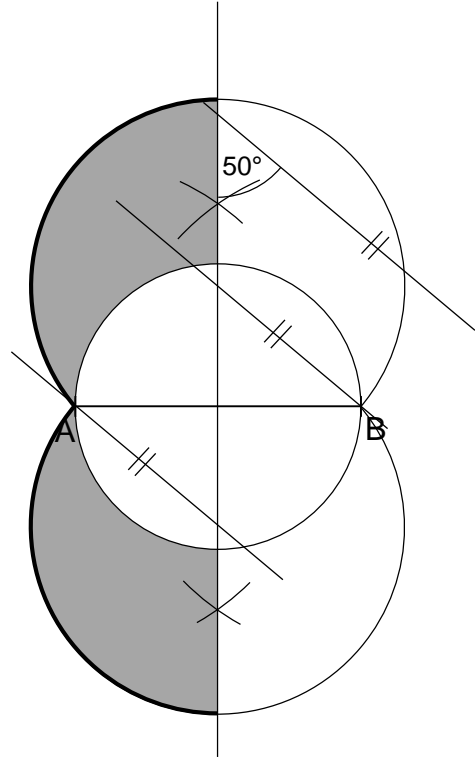
**Aufgabe 1** a) Konstruiere alle Punkte, von welchen aus man die Strecke AB unter einem Winkel sehen kann, der mindestens  $45^\circ$  aber höchstens  $110^\circ$  beträgt.

b) Konstruiere alle Punkte von welchen aus man die Strecke AB unter einem Winkel sehen kann, der mindestens  $50^\circ$  aber höchstens  $90^\circ$  beträgt. Die Punkte sollen ausserdem näher bei A liegen als bei B.

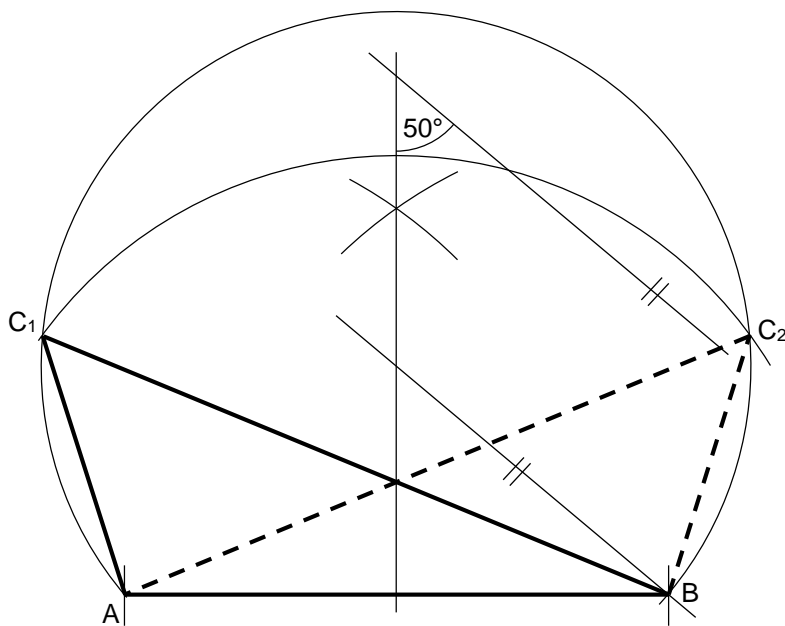
a)



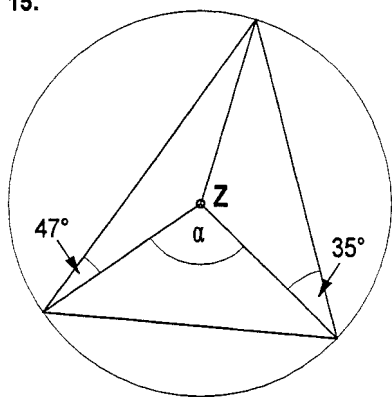
b)



**Aufgabe 2** Konstruiere ein Dreieck aus  $c = 72$  mm,  $sc = 58$  mm und  $\gamma = 50^\circ$ .

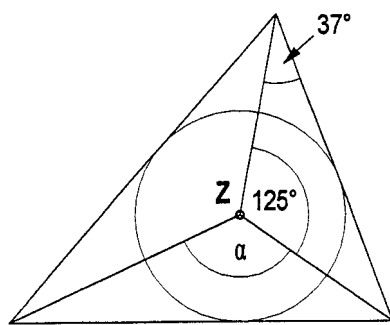


15.



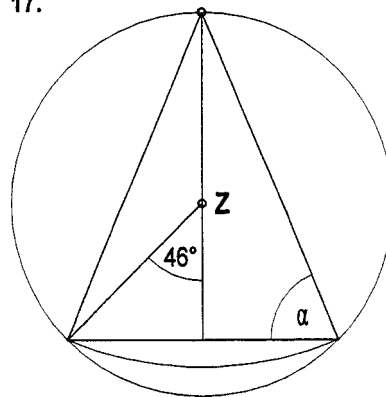
$\alpha = \underline{82^\circ}$

16.



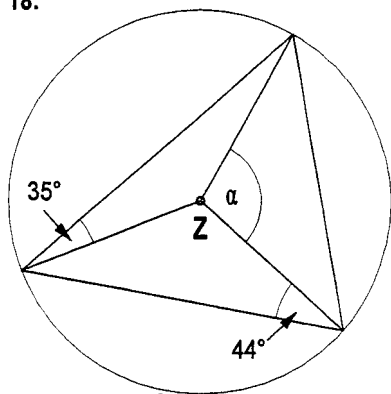
$\alpha = \underline{127^\circ}$

17.



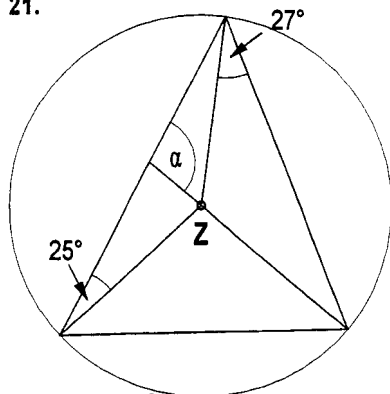
$\alpha = \underline{67^\circ}$

18.



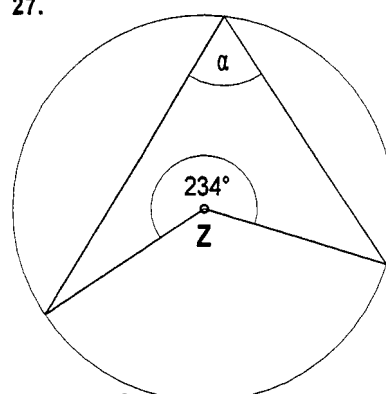
$\alpha = \underline{158^\circ}$

21.



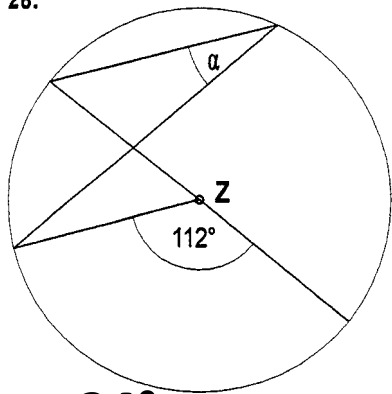
$\alpha = \underline{101^\circ}$

27.



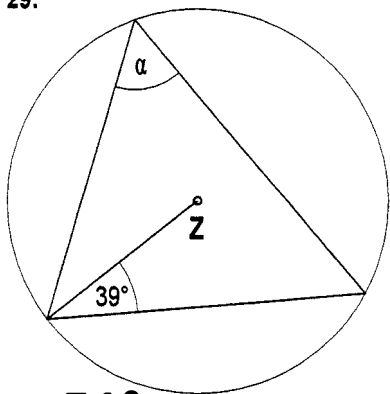
$\alpha = \underline{63^\circ}$

28.



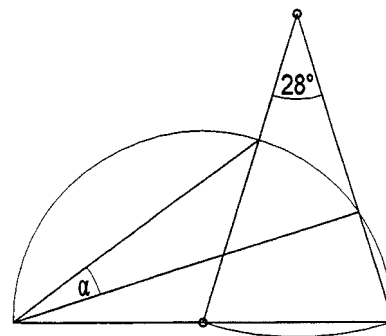
$\alpha = \underline{34^\circ}$

29.



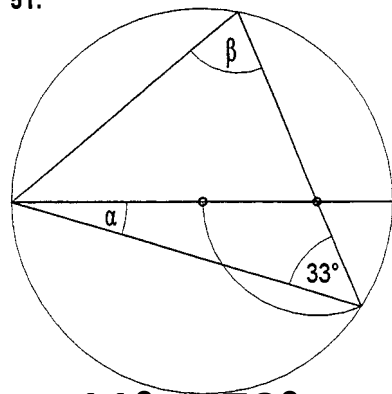
$\alpha = \underline{51^\circ}$

50.



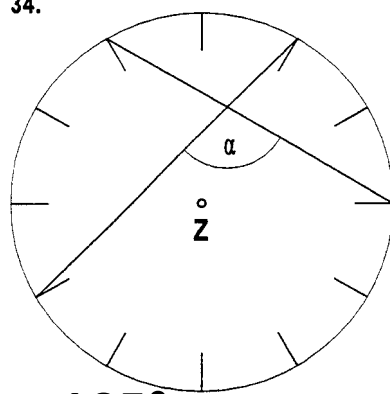
$\alpha = \underline{24^\circ}$

51.



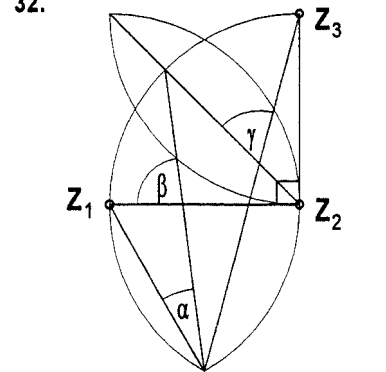
$\alpha = \underline{11^\circ} \quad \beta = \underline{79^\circ}$

34.



$\alpha = \underline{105^\circ}$

32.



$\alpha = \underline{22.5^\circ} \quad \beta = \underline{82.5^\circ} \quad \gamma = \underline{60^\circ}$