

1. Bez

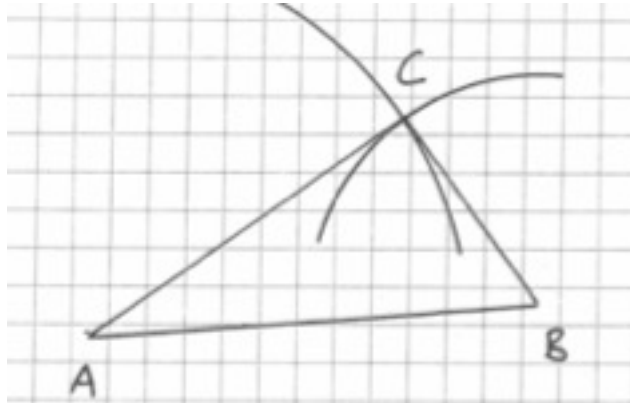
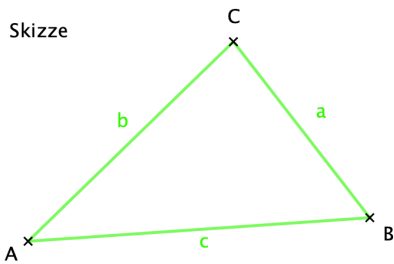
Konstruieren von Dreiecken

Lösungen AB 2

18 Konstruiere das Dreieck mit den jeweiligen Angaben.

a) $a = 3\text{cm}$ $b = 5\text{cm}$ $c = 6\text{cm}$

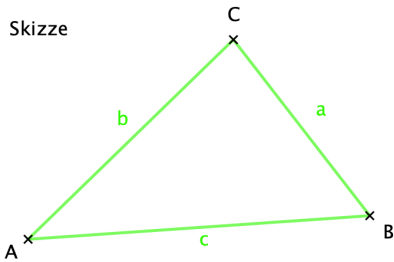
Skizze



KB: 1. $c \rightarrow A, B$
2. $\odot(A, b) \cap \odot(B, a) \rightarrow C$

b) $a = 2\text{cm}$ $b = 4\text{cm}$ $c = 7\text{cm}$!

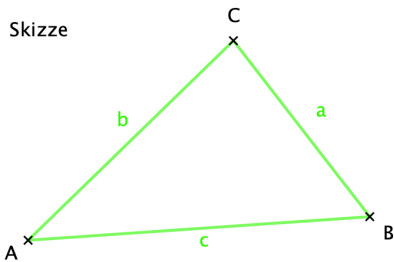
Skizze



KB: 1. $c \rightarrow A, B$
2. $\odot(A, b) \cap \odot(B, a) \rightarrow$ kein Schnittpunkt \rightarrow kein Dreieck

c) $a = 2\text{cm}$ $b = 4\text{cm}$ $c = 6\text{cm}$!

Skizze

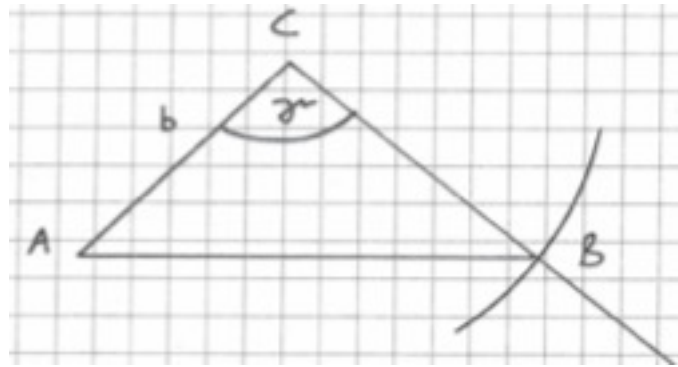
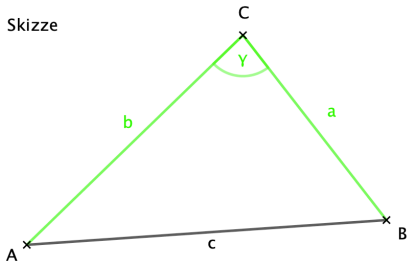


KB: 1. $c \rightarrow A, B$
2. $\odot(A, b) \cap \odot(B, a) \rightarrow$ kein Schnittpunkt \rightarrow kein Dreieck

19 Konstruiere das Dreieck mit den jeweiligen Angaben.

a) $a = 4,2\text{cm}$ $b = 3,8\text{cm}$ $\gamma = 100^\circ$

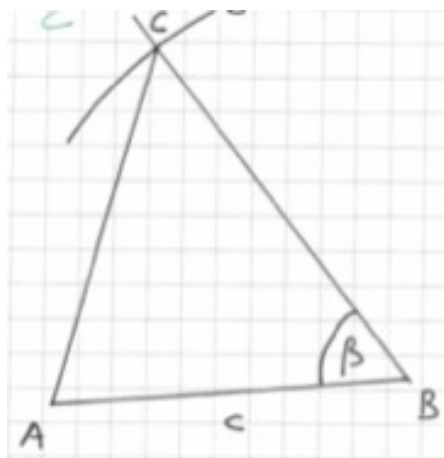
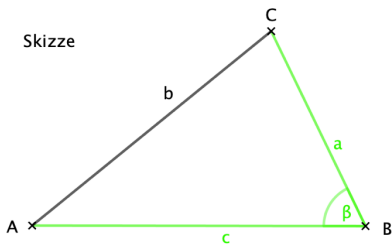
Skizze



- KB: 1. $\gamma \rightarrow C$
 2. $\odot (C, b) \rightarrow A$
 3. $\odot (C, a) \rightarrow B$

b) $a = 6\text{cm}$ $c = 5,2\text{cm}$ $\beta = 57^\circ$

Skizze

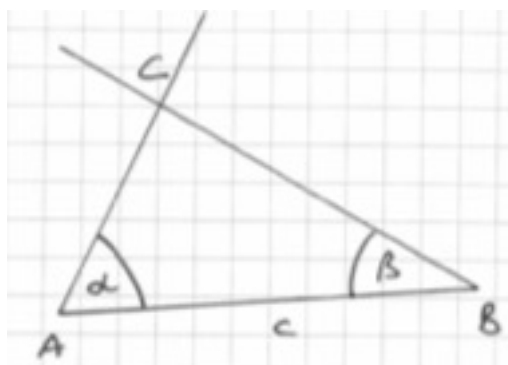
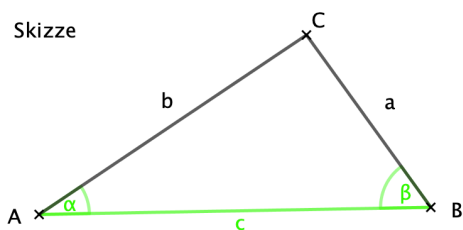


- KB: 1. β in B
 2. $\odot (B, a) \rightarrow C$
 3. $\odot (B, c) \rightarrow A$

20 Konstruiere das Dreieck mit den jeweiligen Angaben.

a) $c = 5,5\text{cm}$ $\alpha = 61^\circ$ $\beta = 33^\circ$

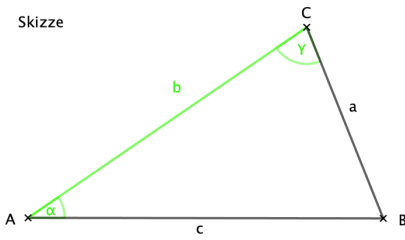
Skizze



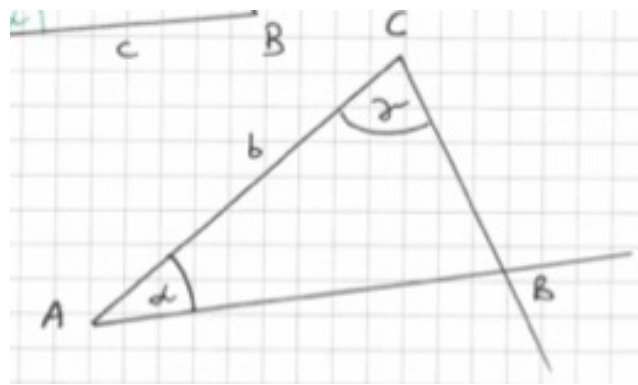
- KB: 1. $c \rightarrow A, B$
 2. α in A
 3. β in B $\rightarrow C$

20 b) $b = 5,9\text{cm}$ $\alpha = 34^\circ$

Skizze



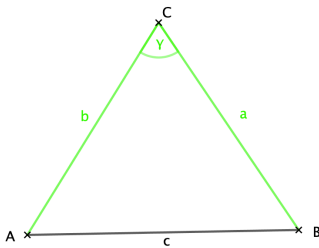
$\gamma = 75^\circ$



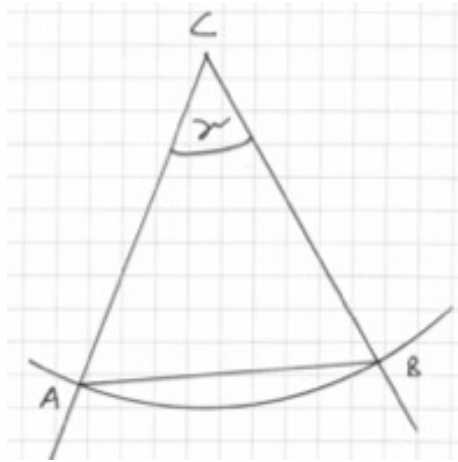
- KB: 1. $b \rightarrow A, C$
2. $\alpha \cap \gamma \rightarrow B$

21 Es handelt sich jeweils um ein gleichschenkliges Dreieck. (Basis c und Spitze C)

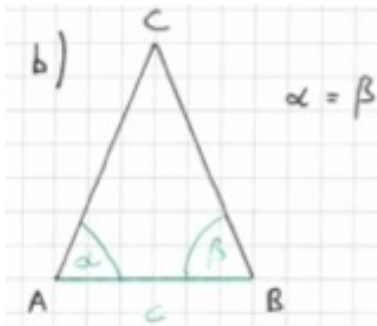
a) $b = 5,3\text{cm}$ $\gamma = 50^\circ$



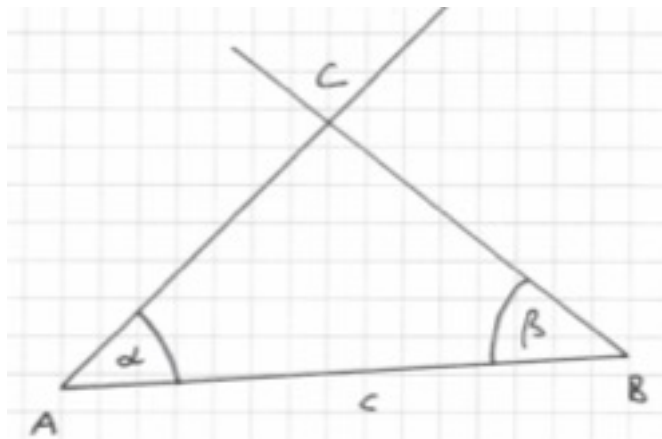
- KB: 1. γ in C
2. $\odot (C, b) \rightarrow A, B$



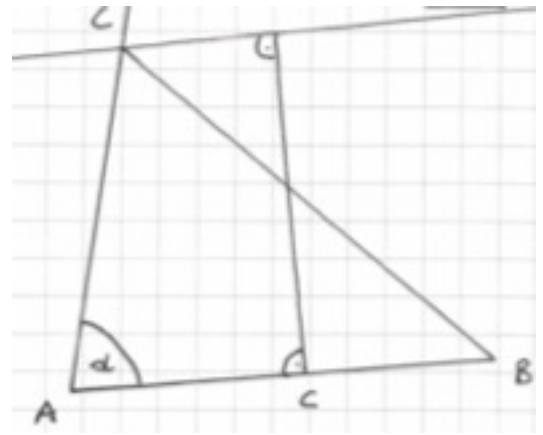
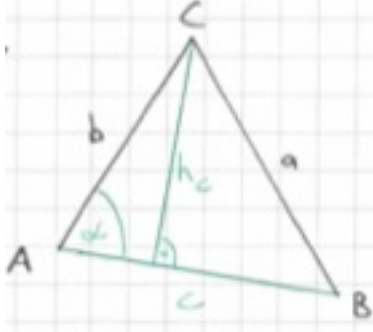
b) $c = 7,5\text{cm}$ $\beta = 41^\circ$



- KB: 1. $c \rightarrow A, B$
2. α in A
3. β in B $\rightarrow C$

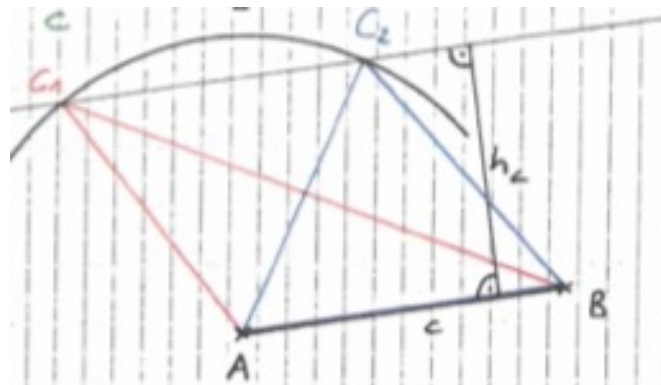
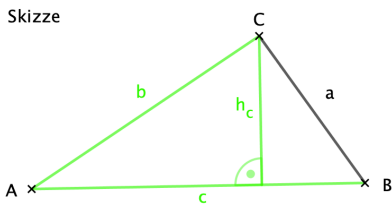


- 42 Konstruiere das Dreieck mit den jeweiligen Angaben.
 a) $c = 5,6\text{cm}$ $\alpha = 77^\circ$ $h_c = 4,5\text{cm}$



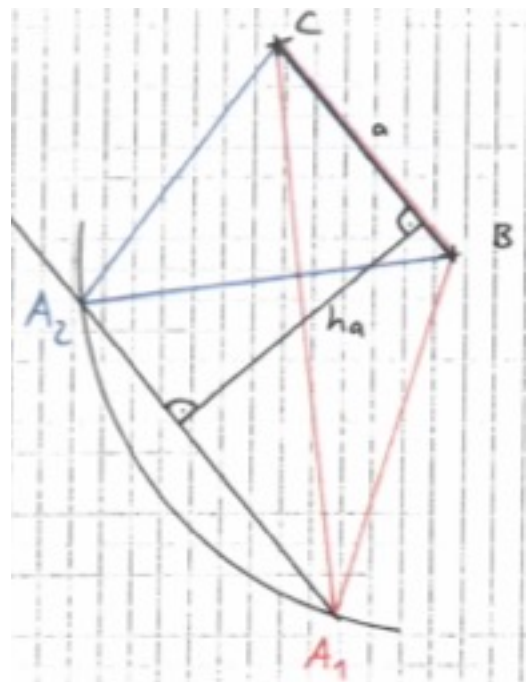
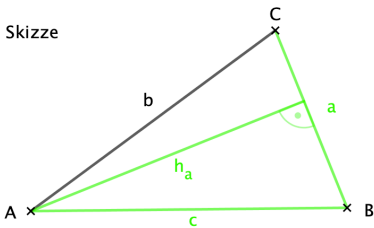
- KB: 1. Höhenstreifen h_c
 2. $\odot (A, c) \rightarrow B$
 3. α in $A \rightarrow C$

- 43 Konstruiere jeweils ein Dreieck.
 a) $b = 4\text{cm}$ $c = 4,5\text{cm}$ $h_c = 3,5\text{cm}$



- KB: 1. Höhenstreifen h_c
 2. $\odot (A, c) \rightarrow B$
 3. $\odot (A, b) \rightarrow C$

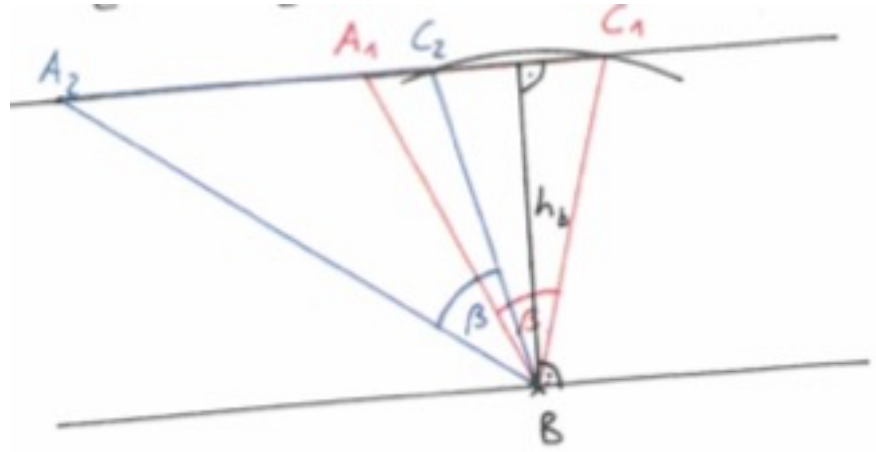
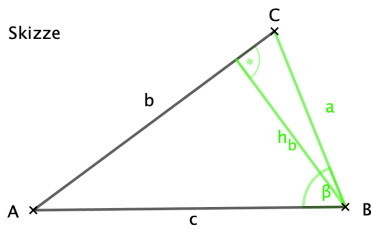
- b) $h_a = 4,2\text{cm}$ $c = 5\text{cm}$ $a = 3,6\text{cm}$



- KB: 1. Höhenstreifen h_a
 2. $\odot (B, c) \rightarrow A$
 3. $\odot (B, a) \rightarrow C$

c) $h_b = 4,2\text{cm}$ $a = 4,4\text{cm}$ $\beta = 40^\circ$

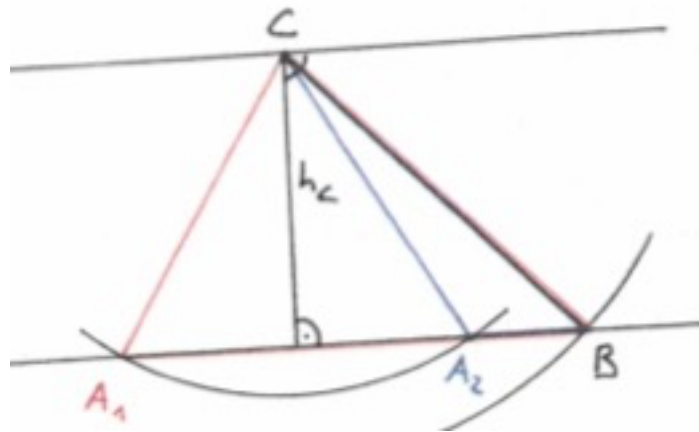
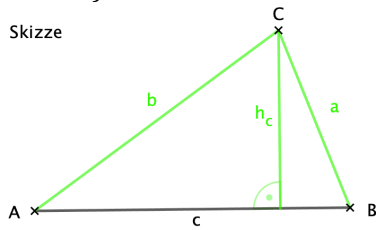
Skizze



- KB: 1. Höhenstreifen h_b
 2. $\odot (C, a) \rightarrow B$
 3. β in $B \rightarrow A$

d) $h_c = 3,8\text{cm}$ $a = 5,4\text{cm}$ $b = 4,5\text{cm}$

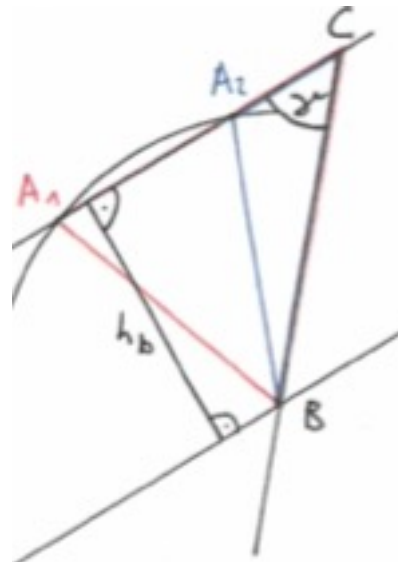
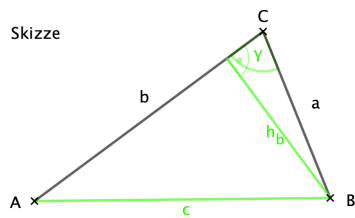
Skizze



- KB: 1. Höhenstreifen h_c
 2. $\odot (C, a) \rightarrow B$
 3. $\odot (C, b) \rightarrow A$

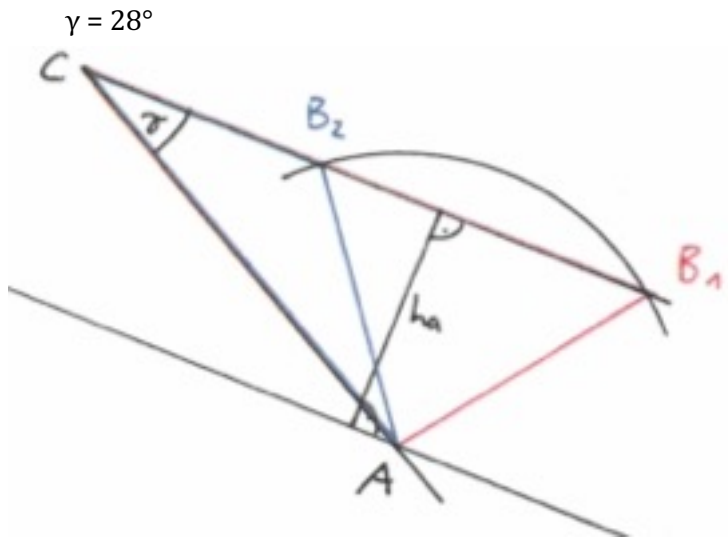
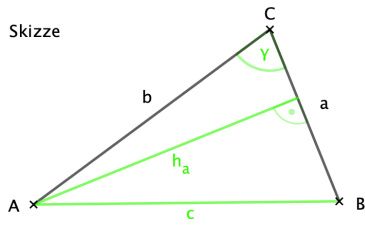
e) $h_b = 3,6\text{cm}$ $c = 3,8\text{cm}$ $\gamma = 50^\circ$

Skizze



- KB: 1. Höhenstreifen h_b
 2. γ in $C \rightarrow B$
 3. $\odot (B, c) \rightarrow A$

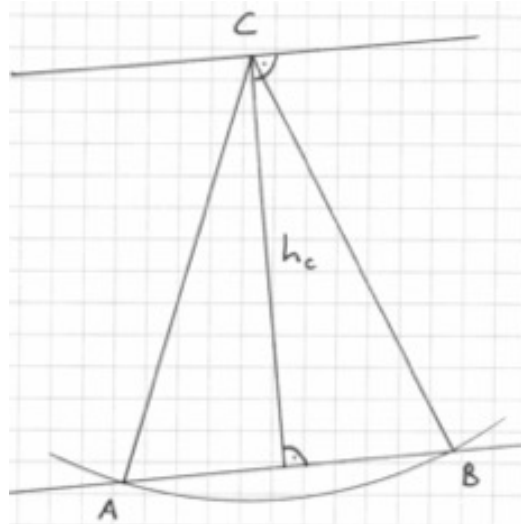
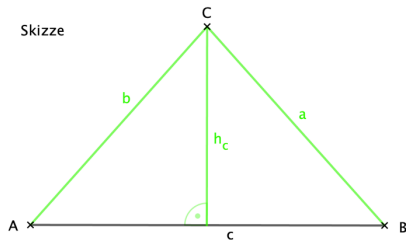
f) $c = 3,8\text{cm}$ $h_a = 3\text{cm}$



- KB: 1. Höhenstreifen h_a
 2. γ in $C \rightarrow A$
 3. $\odot (A, c) \rightarrow B$

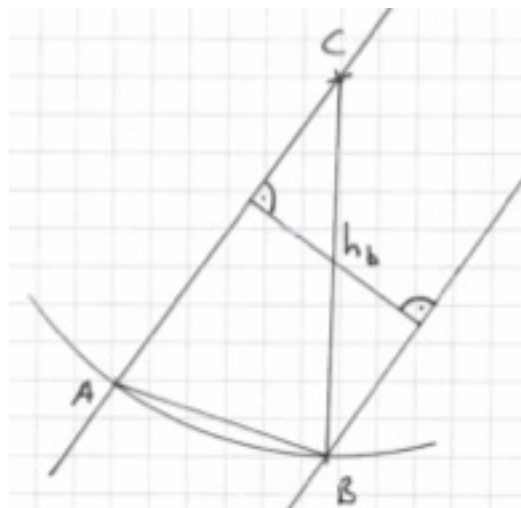
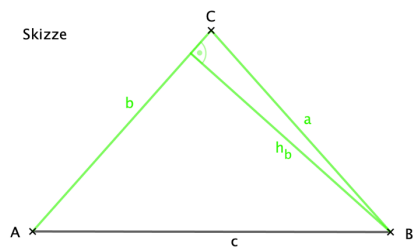
44 Es handelt sich jeweils um ein gleichschenkliges Dreieck. (Basis c und Spitze C)

a) $h_c = 6,5\text{cm}$ $a = 7\text{cm}$



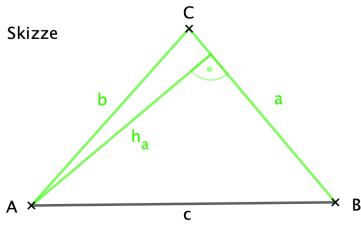
- KB: 1. Höhenstreifen h_c
 2. $\odot (C, a) \rightarrow A, B$

b) $h_b = 2,8\text{cm}$ $b = 5\text{cm}$

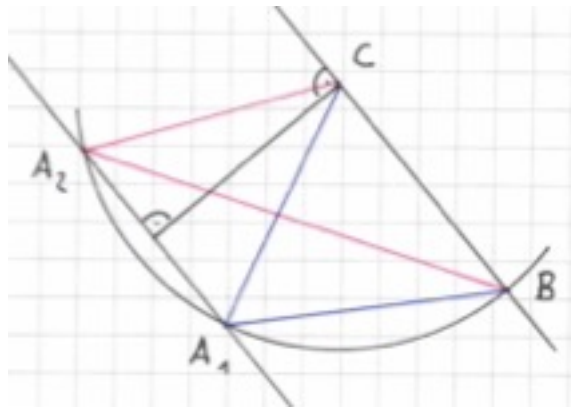


- KB: 1. Höhenstreifen h_b
 2. $\odot (C, b) \rightarrow A, B$

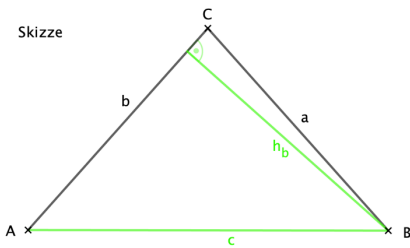
c) $h_a = 3,2\text{cm}$ $b = 3,5\text{cm}$



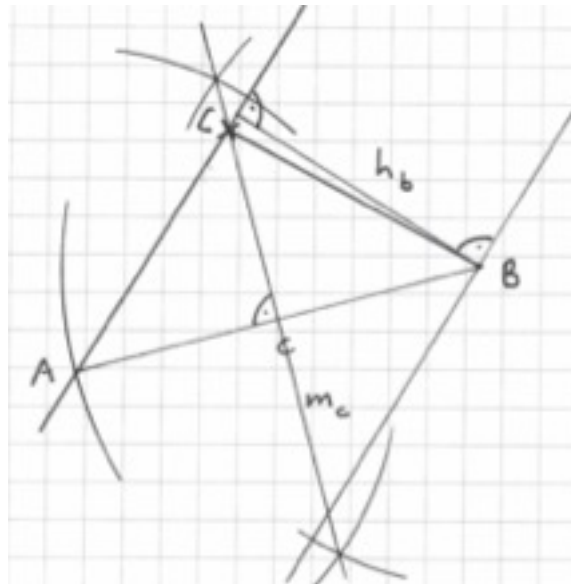
- KB: 1. Höhenstreifen h_a
 2. $\odot (C, b) \rightarrow A, B$



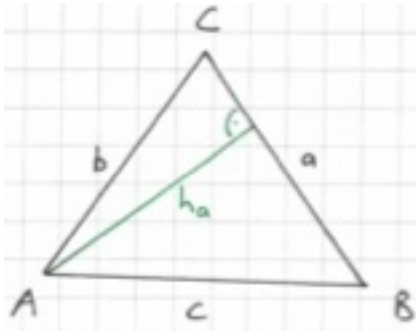
d) $h_b = 3,8\text{cm}$ $c = 5,5\text{cm}$



- KB: 1. Höhenstreifen h_b
 2. $\odot (B, c) \rightarrow A$
 3. $m_c \rightarrow C$



45 Konstruiere ein gleichseitiges Dreieck mit $h_a = 3,5\text{cm}$.



- KB: 1. Höhenstreifen h_a
 2. γ in $C \rightarrow A$
 3. α in $A \rightarrow C$

