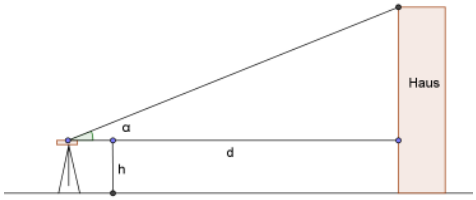
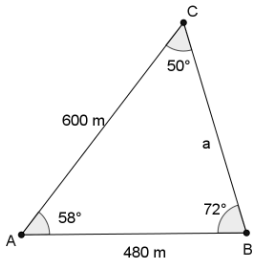
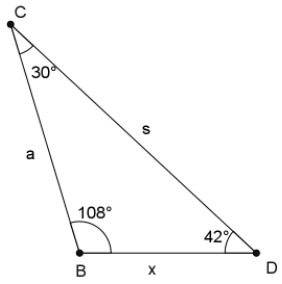
Trigonometrie

Nr.	In. Ko.	Pr. Ko.	Lösungshinweise	BE
1)	RuF	Mod Kom	- Messen der Entfernung d vom Theodoliten zum Haus. - Messen der Peilhöhe h des Theodliten. - Messen des Höhenwinkels α. 	4
2a)	GuM	Sft	$\gamma = 180° - 72° - 58° = 50°$ $\beta = 180° - 72° = 108°$ $\varepsilon = 180° - 108° - 30° = 42°$	3
2b)	GuM	Pro Dar	Mögliches Vorgehen: Planfigur 1:  $\frac{a}{600} = \frac{\sin 58°}{\sin 72°} \quad \lvert \cdot 600$ $a = \frac{600 \cdot \sin 58°}{\sin 72°}$ Planfigur 2:  $\frac{x}{a} = \frac{\sin 30°}{\sin 42°} \quad \lvert \cdot a$ $x = \frac{a \cdot \sin 30°}{\sin 42°}$	8
2c)	ZOp	Pro Arg	Statt $\sin\gamma$ muss es $\frac{1}{\sin\gamma}$ heißen. Richtige Umformung: $\frac{600}{480} = \frac{\sin 72°}{\sin\gamma}$ $\frac{480}{600} = \frac{\sin\gamma}{\sin 72°} \quad \lvert \cdot \sin 72°$ $\frac{480 \cdot \sin 72°}{600} = \sin\gamma$	5
				20