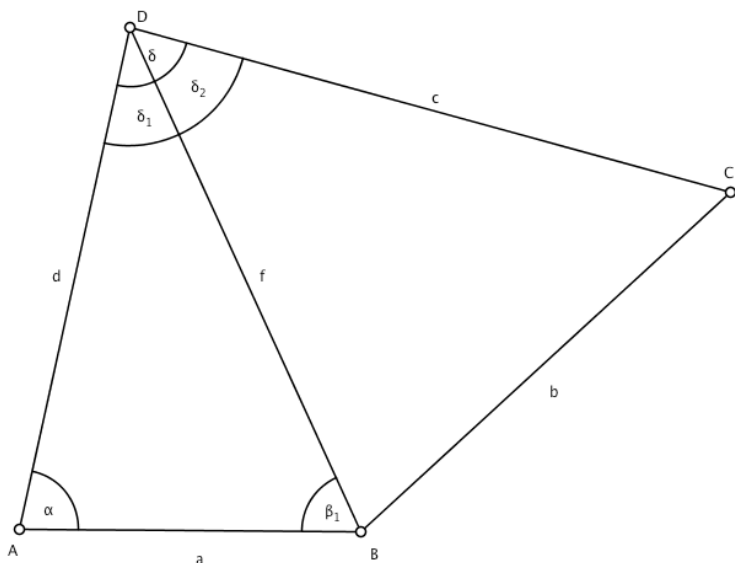


LÖSUNG ZU 798a:



$$a = 115 \text{ m} \quad c = 210 \text{ m} \quad d = 173 \text{ m} \quad \beta_1 = 65^\circ \quad \delta = 87^\circ$$

$$\frac{\sin(\delta_1)}{a} = \frac{\sin(\beta_1)}{d}$$

$$\frac{\sin(\delta_1)}{115} = \frac{\sin(65^\circ)}{173} \quad \rightarrow \quad \sin(\delta_1) = \frac{\sin(65^\circ)}{173} \cdot 115 \quad \rightarrow \quad \delta_1 = 37,05^\circ$$

$$\alpha = 180^\circ - (\beta_1 + \delta_1) \quad \rightarrow \quad \alpha \approx 77,95^\circ$$

$$\frac{f}{\sin(\alpha)} = \frac{d}{\sin(\beta_1)}$$

$$\frac{f}{\sin(77,95^\circ)} = \frac{173}{\sin(65^\circ)} \quad \rightarrow \quad f = \frac{173}{\sin(65^\circ)} \cdot \sin(77,95^\circ) \approx 186,68 \text{ m}$$

$$\delta_2 = \delta - \delta_1 \quad \rightarrow \quad \delta_2 \approx 49,95^\circ$$

$$b = \sqrt{c^2 + f^2 - 2cf \cdot \cos(\delta_2)} \quad \rightarrow \quad b \approx 168,83 \text{ m}$$

$$u = a + b + c + d \quad \rightarrow \quad u \approx 666,83 \text{ m}$$

$$A = \frac{a \cdot d \cdot \sin(\alpha)}{2} + \frac{c \cdot f \cdot \sin(\delta_2)}{2} \quad \rightarrow \quad A \approx 24\,733,91 \text{ m}^2$$

