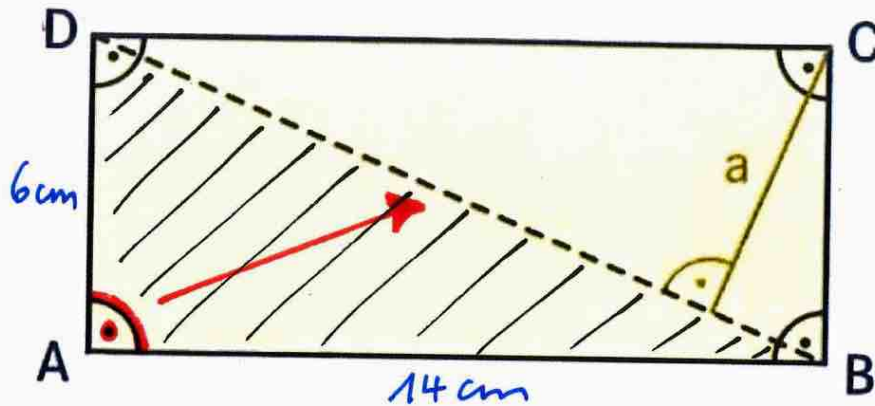


Lösung:

Welchen Abstand a hat die Ecke C von der Diagonalen BD?

$$AB = 14 \text{ cm}, \quad AD = 6 \text{ cm}$$



$$\begin{aligned} \bullet \quad \overline{BD}^2 &= \overline{AB}^2 + \overline{AD}^2 && |\sqrt{} \\ \overline{BD} &= \sqrt{\overline{AB}^2 + \overline{AD}^2} \\ &= \sqrt{14^2 + 6^2} = \sqrt{196 + 36} = \underline{\underline{\sqrt{232} \text{ cm}}} \end{aligned}$$

$$\begin{aligned} \bullet \quad A_{\triangle ABD} &= \frac{14 \text{ cm} \cdot 6 \text{ cm}}{2} = \underline{42 \text{ cm}^2} \\ A_{\triangle BCO} &= \frac{\overline{BD} \cdot a}{2} = \frac{\sqrt{232} \text{ cm} \cdot a}{2} \end{aligned} \quad \left. \vphantom{\begin{aligned} A_{\triangle ABD} \\ A_{\triangle BCO} \end{aligned}} \right\} A_{\triangle ABD} = A_{\triangle BCO}$$

$$\begin{aligned} \Rightarrow \quad 42 &= \frac{\sqrt{232} \cdot a}{2} && | \cdot 2 \\ 84 &= \sqrt{232} \cdot a && | : \sqrt{232} \\ \underline{\underline{\frac{84}{\sqrt{232}}}} &= a \end{aligned}$$

$$a \hat{=} \underline{\underline{5,5 \text{ cm}}}$$