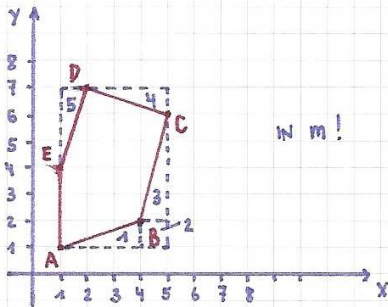


Flächenberechnungen: Vielecke (mit Hilfe eines Koordinatensystems)

Lösungen

FLÄCHENBERECHNUNGEN: VIELECKE LÖSUNGEN

Nr 1

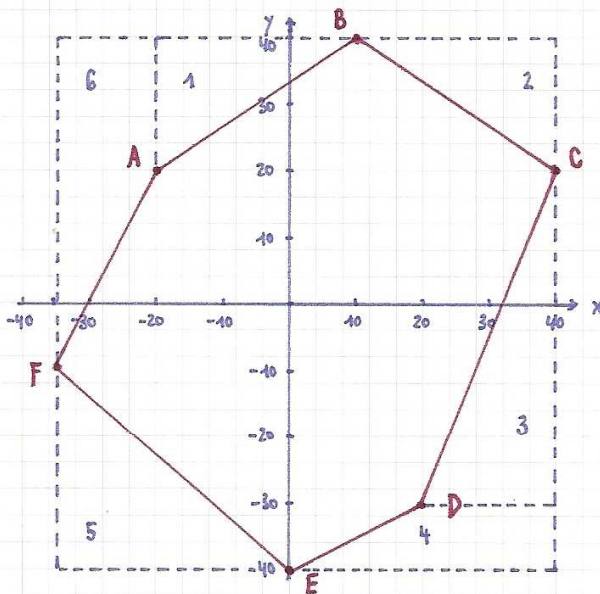


MUSTERLÖSUNG:

$$\begin{aligned}
 A_{\text{Dotted}} &= a \cdot b = 4 \cdot 6 = 24 \text{ m}^2 \\
 - A_1 &= \frac{a \cdot b}{2} = \frac{3 \cdot 1}{2} = 1,5 \text{ m}^2 \\
 - A_2 &= s^2 = 1^2 = 1 \text{ m}^2 \\
 - A_3 &= \frac{a \cdot b}{2} = \frac{4 \cdot 1}{2} = 2 \text{ m}^2 \\
 - A_4 &= \frac{a \cdot b}{2} = \frac{3 \cdot 1}{2} = 1,5 \text{ m}^2 \\
 - A_5 &= \frac{a \cdot b}{2} = \frac{3 \cdot 1}{2} = 1,5 \text{ m}^2
 \end{aligned}$$

$$\underline{\underline{A_{\text{ABCDE}} = 16,5 \text{ m}^2}}$$

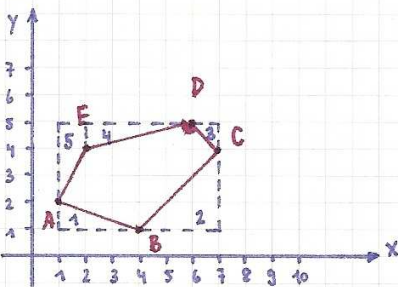
Nr 2 1:1000 heißt 1m $\hat{=}$ 1mm oder 10m $\hat{=}$ 1cm!



$$\begin{aligned}
 A_{\text{Dotted}} &= 75 \cdot 80 = 6000 \text{ m}^2 \\
 - A_1 &= \frac{30 \cdot 20}{2} = 300 \text{ m}^2 \\
 - A_2 &= \frac{30 \cdot 20}{2} = 300 \text{ m}^2 \\
 - A_3 &= \frac{50 \cdot 20}{2} = 500 \text{ m}^2 \\
 - A_4 &= \frac{40 + 20}{2} \cdot 10 = 300 \text{ m}^2 \\
 - A_5 &= \frac{30 \cdot 35}{2} = 525 \text{ m}^2 \\
 - A_6 &= \frac{50 + 20}{2} \cdot 15 = 525 \text{ m}^2
 \end{aligned}$$

$$\underline{\underline{A_{\text{ABCDEF}} = 3550 \text{ m}^2}}$$

Nr 3



$$\begin{aligned}
 A_{\text{Dotted}} &= 6 \cdot 4 = 24,0 \text{ m}^2 \\
 - A_1 &= \frac{3 \cdot 1}{2} = 1,5 \text{ m}^2 \\
 - A_2 &= \frac{3 \cdot 3}{2} = 4,5 \text{ m}^2 \\
 - A_3 &= \frac{1 \cdot 1}{2} = 0,5 \text{ m}^2 \\
 - A_4 &= \frac{4 \cdot 1}{2} = 2,0 \text{ m}^2 \\
 - A_5 &= \frac{3 + 1}{2} \cdot 1 = 2,0 \text{ m}^2
 \end{aligned}$$

$$\underline{\underline{\Rightarrow A = 13,5 \text{ m}^2}}$$