

Calcul de la surface du quadrilatère.

$$S = S_{ADE} + S_{DEC} + S_{CEB} + S_{AEB}$$

$$\begin{aligned} S_{AEB} &= \frac{1}{2} \times a \times c + s \cdot \beta = \frac{1}{2} \times 103,56 \times 121,48 + s \cdot (63,03) \\ &= 5259,05 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} S_{ADE} &= \frac{1}{2} \times a \times c + s \cdot \beta = \frac{1}{2} \times 121,48 \times 217,34 + s \cdot (23,60) \\ &= 4782,48 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} S_{CEB} &= \frac{1}{2} \times a \times c + s \cdot \beta = \frac{1}{2} \times 108,22 \times 130 + s \cdot (131,76) \\ &= 6176,34 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} S_{DEC} &= \frac{1}{2} \times a \times c + s \cdot \beta = \frac{1}{2} \times 130 \times 112,33 + s \cdot (58,11) \\ &= 5810,34 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} \text{Donc } S &= 5259,05 + 4782,48 + 6176,34 + 5810,34 \\ &= \underline{\underline{22028,21 \text{ m}^2}} \end{aligned}$$