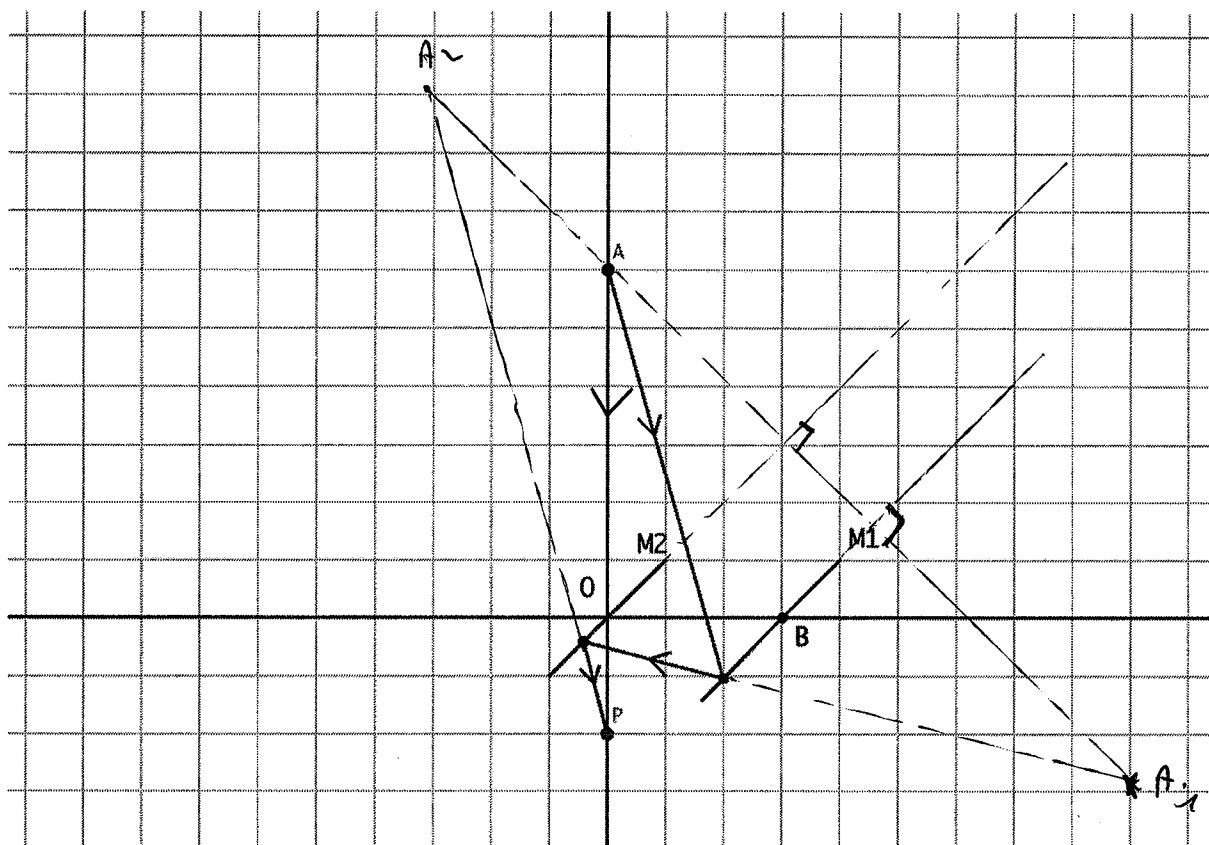
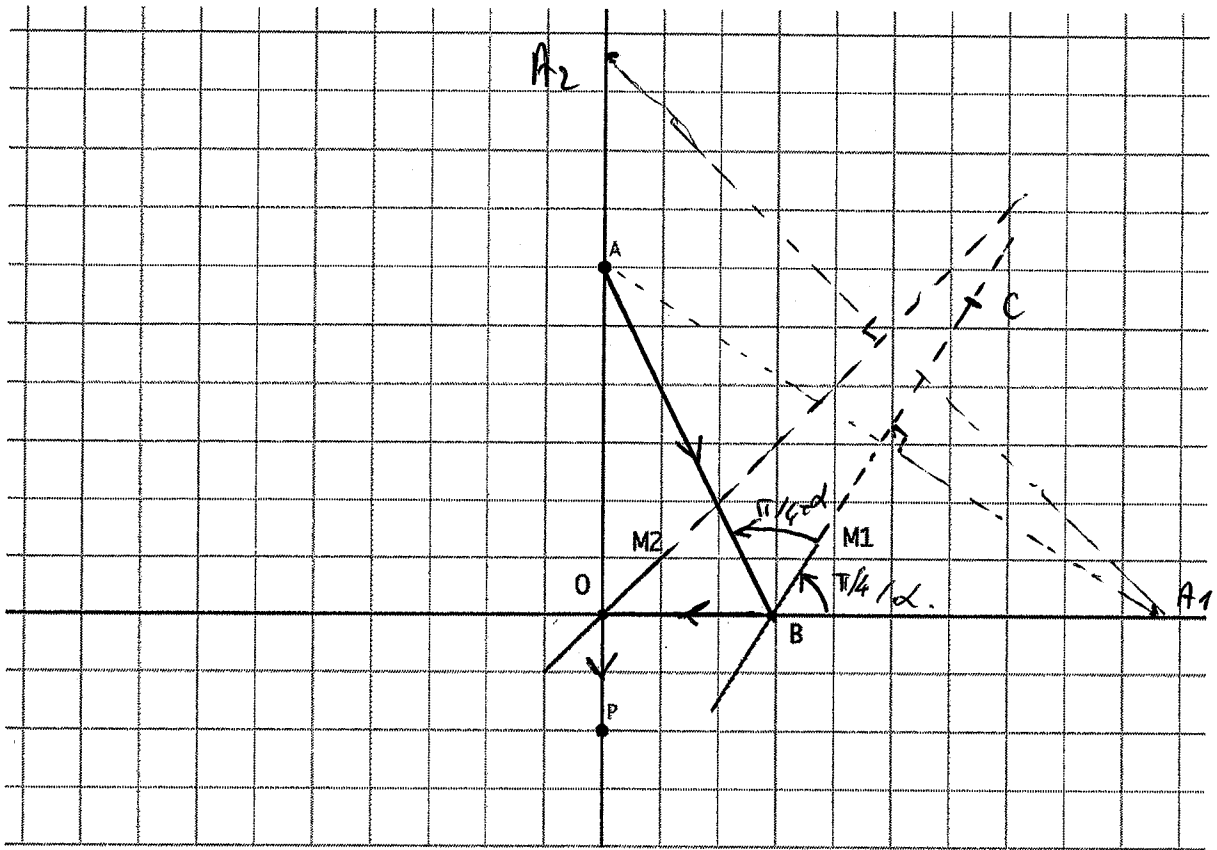




Annexe 1.

$$A_1 = \text{sym}(A) / M_1$$

$$A_2 = \text{sym}(A_1) / M_2$$



$$b = OB$$

Annexe 2.

$$\widehat{(A_1 B C)} = \pi/4 + \alpha$$

$$\widehat{(A_1 B A)} = 2(\pi/4 + \alpha)$$

$$\Rightarrow \widehat{(O B A)} = \pi - \widehat{(A_1 B A)} = \pi/2 - 2\alpha.$$

$$\tan(\widehat{O B A}) = \frac{OA}{b}$$

$$OA = b \tan(\pi/2 - 2\alpha) = \frac{b}{\tan 2\alpha}$$

$$PA = a + \frac{b}{\tan 2\alpha} \stackrel{\text{A.M.}}{=} 40 + 60 / \tan(2 \times 13,28)$$

$$PA = 160 \text{ cm}$$