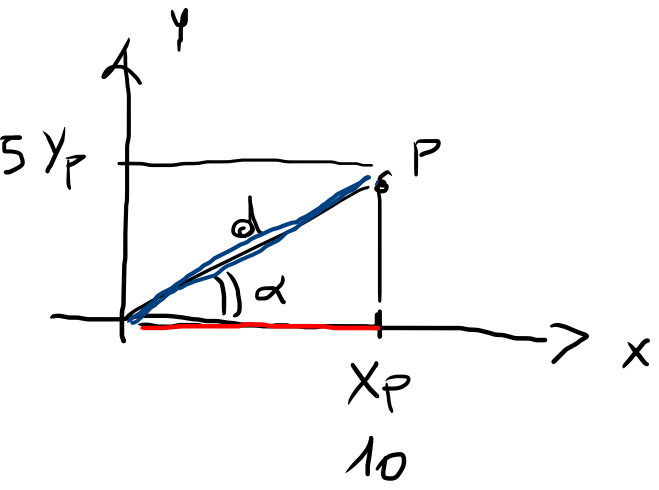
Rect → polare



$P(x_P, y_P) \rightsquigarrow P(d, \alpha)$

$(10, 5) \qquad (11{,}18,\ 26°56)$

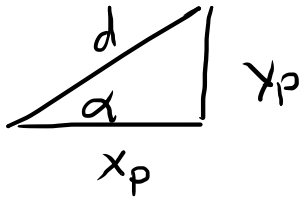
$$d = \sqrt{x_P^2 + y_P^2} = \sqrt{10^2 + 5^2} = \sqrt{125} = 11{,}18$$

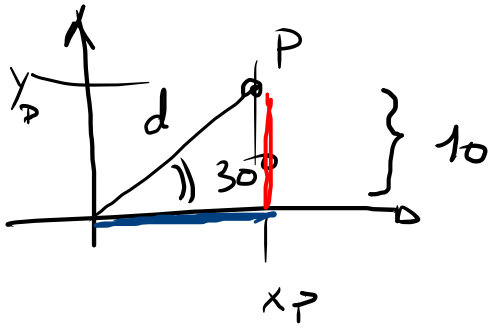
$$\cos\alpha = \frac{x_P}{d} = \frac{10}{11{,}18} = 0{,}89 \rightsquigarrow \alpha = \arccos(0{,}89) = 26°56$$

$\cos^{-1}$

$$\text{sen}\,\alpha = \frac{y_P}{d} = \frac{5}{11{,}18} = \rightsquigarrow \alpha = \text{arcsin}(\dots) = 26°56$$

$P(20, 30°)$





17,32

$\text{sen}\,\alpha = \frac{y_p}{d}$ ⇓ $\quad y_p = d \cdot \text{sen}\,\alpha$

$\cos\alpha = \frac{x_p}{d}$ ⇓ $\quad x_p = d \cdot \cos\alpha$

$y_p = 20 \cdot \text{sen}(30°) = 20 \cdot 0{,}5 = 10$

$x_p = 20 \cdot \cos(30°) = 20 \cdot 0{,}866 = 17{,}32$

$P(17{,}32,\ 10)$