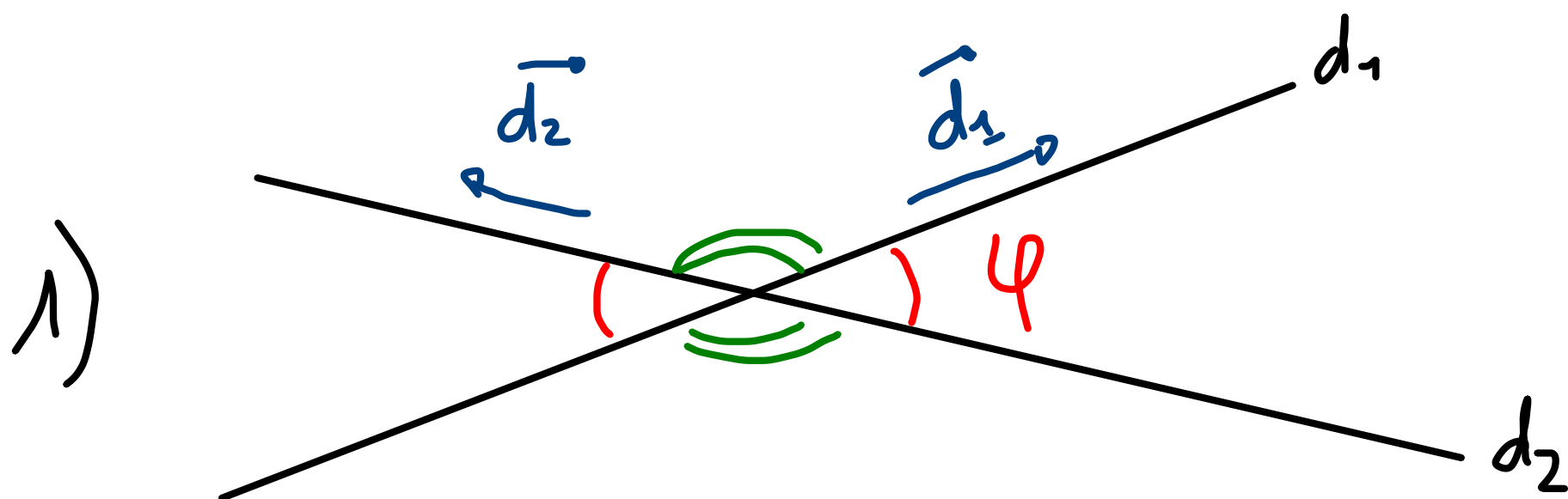


## 3.2 Questions métriques

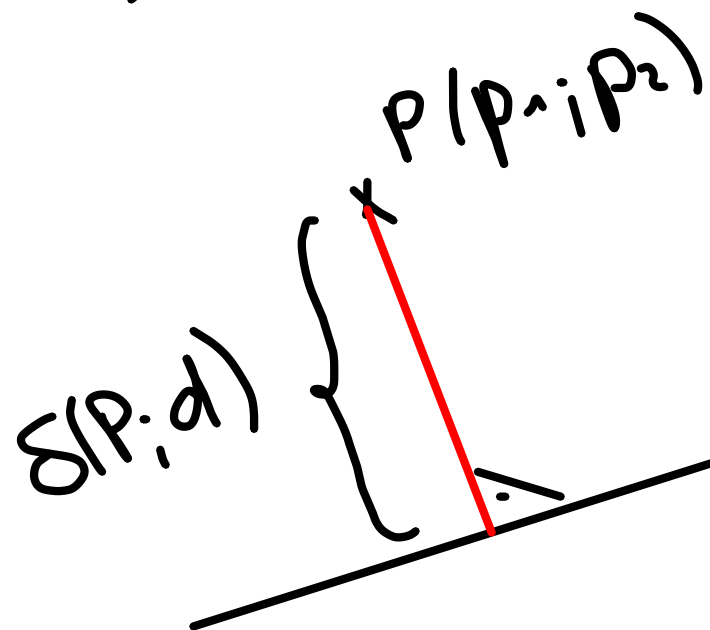


Angle aigu entre  
deux droites :

$$\varphi = \cos^{-1} \left( \frac{|\vec{d}_1 \cdot \vec{d}_2|}{\|\vec{d}_1\| \cdot \|\vec{d}_2\|} \right)$$

formulaire

2) Distance entre un point et une droite



$$d: ax + by + c = 0$$

$$S(P; d) = \frac{|ap_1 + bp_2 + c|}{\sqrt{a^2 + b^2}}$$

norme du vecteur  
normal  $\vec{n} = \begin{pmatrix} a \\ b \end{pmatrix}$

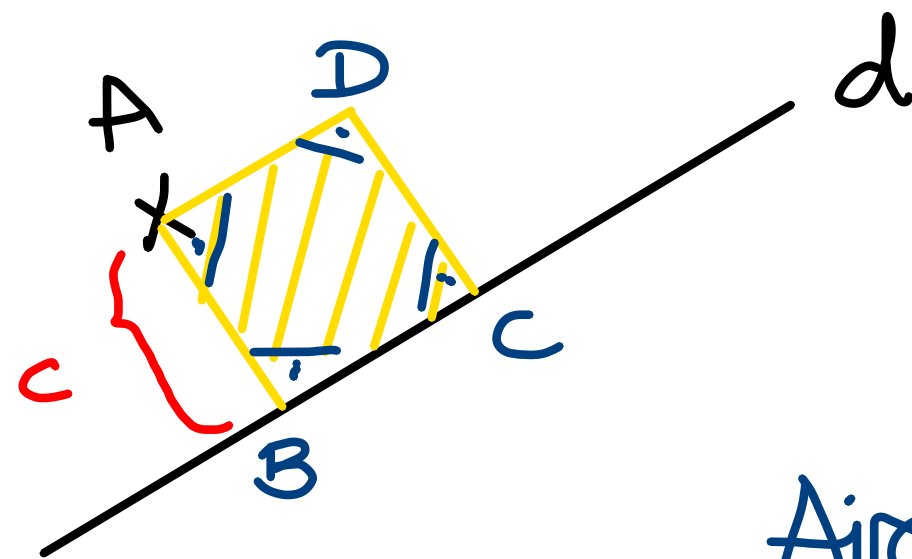
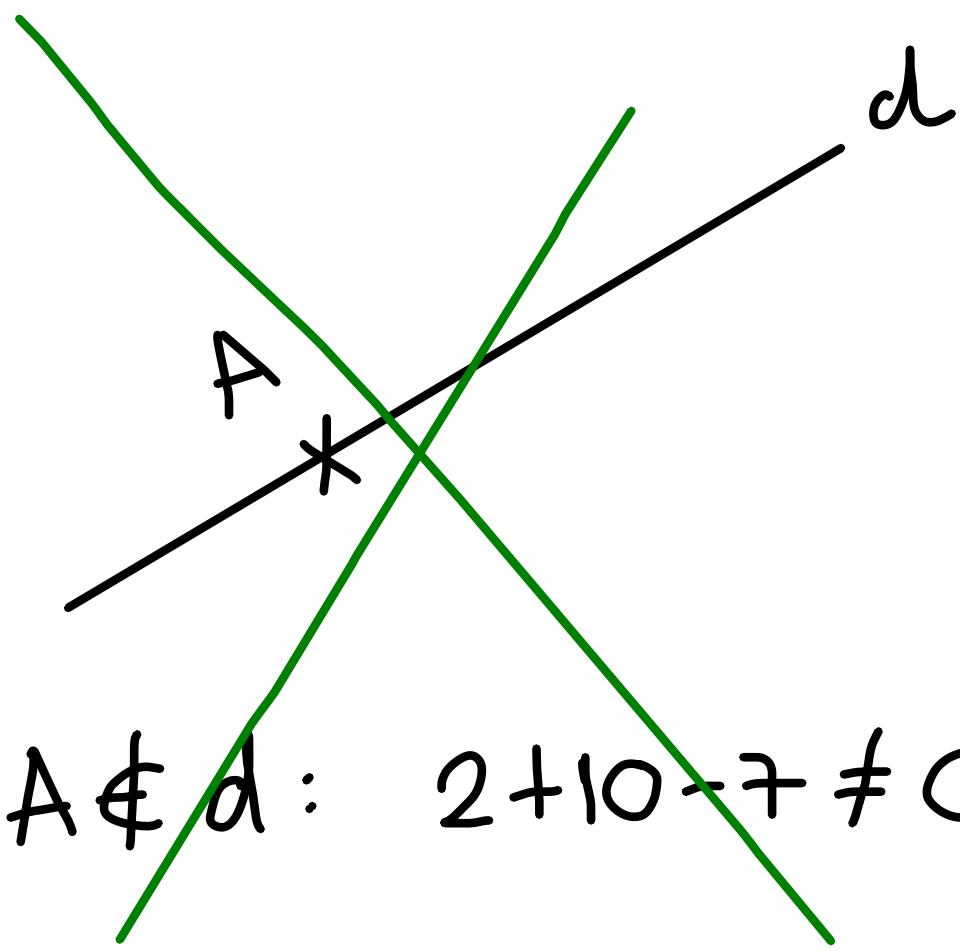
formulaire

# Exemple

ex 3.2.6

$A(2; -5)$

$$d: x = 2y + 7$$
$$\Leftrightarrow x - 2y - 7 = 0$$



Aire = ?  $c^2$

$$A \notin d: 2 + 10 - 7 \neq 0$$

$$c = \delta(A; d) = \frac{|2 - 2 \cdot (-5) - 7|}{\sqrt{1^2 + (-2)^2}} = \frac{5}{\sqrt{5}}$$

$$\Rightarrow \text{Aire} = c^2 = \left(\frac{5}{\sqrt{5}}\right)^2 = \frac{25}{5} = \underline{\underline{5 u^2}}$$