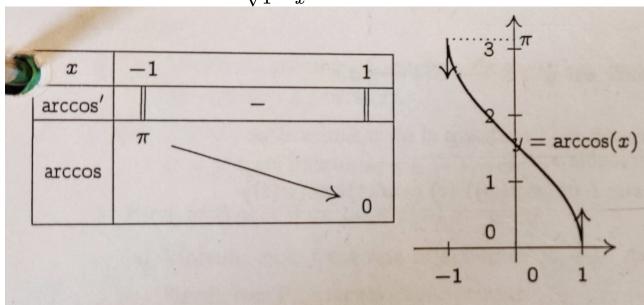
Fonctions circulaires réciproques

#trigonometrie #analyse

Fonction Arccosinus

 $\arccos: [-1,1] \longrightarrow [0,\pi]; \ x \longmapsto \arccos(x)$

- $ullet \ orall x \in [-1,1], orall y \in [0,\pi], \ y = rccos(x) \Leftrightarrow x = \cos(y)$
- $\bullet \ \ \forall x \in]-1,1[,\ \arccos'(x)=-\frac{1}{\sqrt{1-x^2}}$

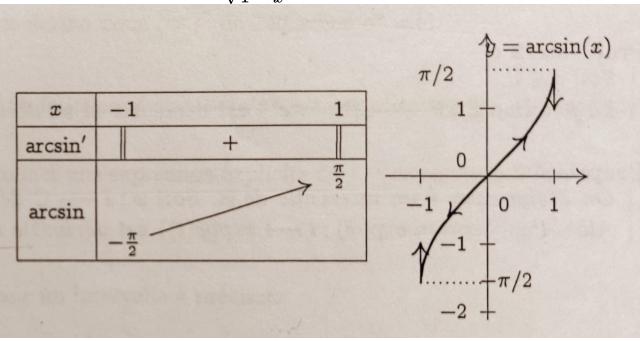


Fonction Arcsinus

 $\arcsin: [-1,1] \longrightarrow \left[-\tfrac{\pi}{2}, \tfrac{\pi}{2}\right]; \ x \longmapsto \arcsin(x)$

 $\bullet \ \ \forall x \in [-1,1], \forall y \in \left[-\frac{\pi}{2}, \frac{\pi}{2}\right], \ y = \arcsin(x) \Leftrightarrow x = \sin(y)$

 $\bullet \ \ \forall x \in]-1,1[, \ \arcsin'(x) = \frac{1}{\sqrt{1-x^2}}$



Fonction Arctangente

 $\arctan: \mathbb{R} \longrightarrow \left[-\frac{\pi}{2}, \frac{\pi}{2}\right]; \ x \longmapsto \arctan(x)$

- $ullet \ orall x \in \mathbb{R}, orall y \in \left[-rac{\pi}{2},rac{\pi}{2}
 ight], \ y = rctan(x) \Leftrightarrow x = an(y)$
- $ullet \ orall x \in \mathbb{R}, \ \mathrm{arctan}'(x) = rac{1}{1+x^2}$

