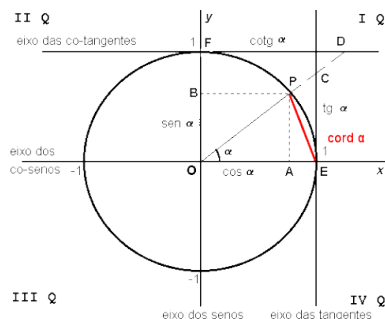
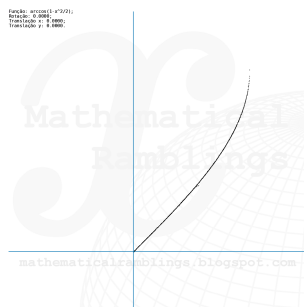


A inversa, a derivada, e a integral da função corda.

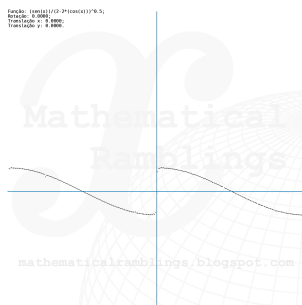


$$\text{cord } \alpha = \sqrt{2(1 - \cos \alpha)}$$

Inversa: seja $\text{arccord} : [0, 2] \rightarrow [0, \pi]$, $\text{arccord } x = \arccos \left(1 - \frac{x^2}{2} \right)$.



Derivada: $(\text{cord } \alpha)' = \frac{\sin \alpha}{\sqrt{2 - 2 \cos \alpha}}$.






Observemos que, para $0 \leq \alpha \leq 2\pi$, $\text{cord } \alpha = 2 \sin \frac{\alpha}{2}$.

Logo,

$$\int \text{cord } \alpha \, d\alpha = -4 \cos \frac{\beta}{2} + c, \quad \alpha = 2k\pi + \beta, \quad k \in \mathbb{Z}, \quad 0 \leq \beta < 2\pi.$$

Documento compilado em Wednesday 12th March, 2025, 22:05, tempo no servidor.

Sugestões, comunicar erros: "a.vandre.g@gmail.com".

Licença de uso:    Atribuição-NãoComercial-CompartilhaIgual (CC BY-NC-SA).