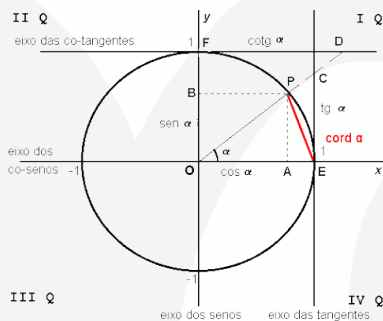


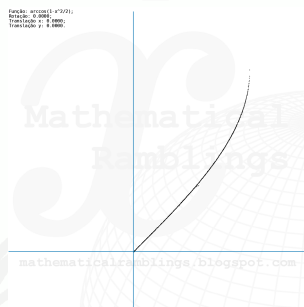
A inversa, a derivada, e a integral da função corda.



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

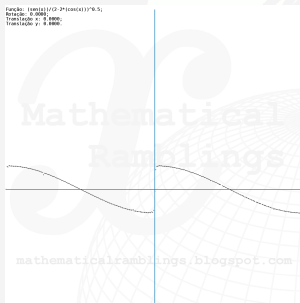
Inversa: seja $\text{arccord} : [0, 2] \rightarrow [0, \pi]$,
 $x \mapsto \text{arccord } x$

$$\text{arccord } x = \arccos \left(1 - \frac{x^2}{2} \right).$$



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,

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

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

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