

TVINN FALLAGREINING I- FORMÚLUBLAÐ

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Hornaföll

$$\cos(\theta) = \frac{e^{i\theta} + e^{-i\theta}}{2}$$

$$\sin^2(\theta) + \cos^2(\theta) = 1$$

$$\frac{\partial f}{\partial z} = \frac{\partial \bar{f}}{\partial \bar{z}}$$

Höfuðgrein hornsins:

$$\sin(\theta) = \frac{e^{i\theta} - e^{-i\theta}}{2i}$$

$$(\cos(\theta) + i \sin(\theta))^n = \cos(n\theta) + i \sin(n\theta)$$

$$\frac{\partial f}{\partial \bar{z}} = \frac{\partial \bar{f}}{\partial z}$$

$$\text{Arg } z = 2 \arctan \left(\frac{y}{|z| + x} \right), \quad \text{Arg} : \mathbb{C} \setminus \mathbb{R}_- \rightarrow]-\pi, \pi[.$$

Höfuðgrein lografallsins:

$$\text{Log } z = \ln |z| + i \text{Arg}(z), \quad \text{Log} : \mathbb{C} \setminus \mathbb{R}_- \rightarrow \mathbb{C}.$$