TVINNFALLAGREINING I- FORMÚLUBLAÐ

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Hornaföll

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

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

$$\overline{\frac{\partial f}{\partial z}} = \frac{\partial \overline{f}}{\partial \overline{z}} \qquad\qquad \overline{\frac{\partial f}{\partial \overline{z}}} = \frac{\partial \overline{f}}{\partial z}$$

Höfuðgrein hornsins:

$$\operatorname{Arg} z = 2\arctan\left(\frac{y}{|z| + x}\right), \qquad \operatorname{Arg} : \mathbb{C} \setminus R_- \to\,]-\pi, \pi[.$$

Höfuðgrein lografallsins:

$$\operatorname{Log} z = \ln|z| + i\operatorname{Arg}(z), \qquad \operatorname{Log} : \mathbb{C} \setminus \mathbb{R}_- \to \mathbb{C}.$$

$$\cos(z) = \frac{e^{iz} + e^{-iz}}{2}$$