TVINNFALLAGREINING I- FORMÚLUBLAÐ

Benedikt Steinar Magnússon <bsm@hi.is>, https://github.com/benediktmag/formulublad

Hornaföll

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

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

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

$$\text{Höfuðgrein hornsins:}$$

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

Höfuðgrein lografallsins:

$$\operatorname{Log} z = \ln |z| + i \operatorname{Arg}(z), \quad \operatorname{Log} : \mathbb{C} \setminus \mathbb{R}_{-} \to \mathbb{C}.$$
$$\operatorname{cos}(z) = \frac{e^{iz} + e^{-iz}}{2}$$
$$\operatorname{sin}(z) = \frac{e^{iz} - e^{-iz}}{2i}$$