## TVINNFALLAGREINING I- FORMÚLUBLAÐ

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## Hornaföll

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

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

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

$$\text{H\"ofu\ethgrein hornsins:}$$

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

Höfuðgrein lografallsins:

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