

$$\text{Kreis } K = \{z \mid |z - \mu| = r\}$$

$$K' = \{f(z) \mid z \in K\} = \{w \mid |w - \mu'| = r'\}$$

$$\mu' = \alpha\mu + \beta, \quad r' = |\alpha|r$$

Bew

$$r' = |\alpha z + \beta - \mu'| = |\alpha(z - \mu)|$$

$$\Leftrightarrow |z - \mu| = \frac{1}{|\alpha|} r' = r$$

