

$$\text{Log } zi = \left\{ \text{Log } z = \ln|z| + i \arg z + i2k\pi \right\}$$

$$z = zi \quad |z| = 2 \quad \begin{array}{l} \cos \alpha = 0 \\ \sin \alpha = 1 \end{array} \Rightarrow \alpha = \frac{\pi}{2}$$

$$\text{Log } zi = \ln 2 + i \frac{\pi}{2} + i2k\pi$$