Complex Variable 作業 2　2006 Fall

$$F(z)=\frac{1}{2}(\sigma_1+\sigma_2)z+\frac{1}{2}(\sigma_1-\sigma_2)\bar{z}$$

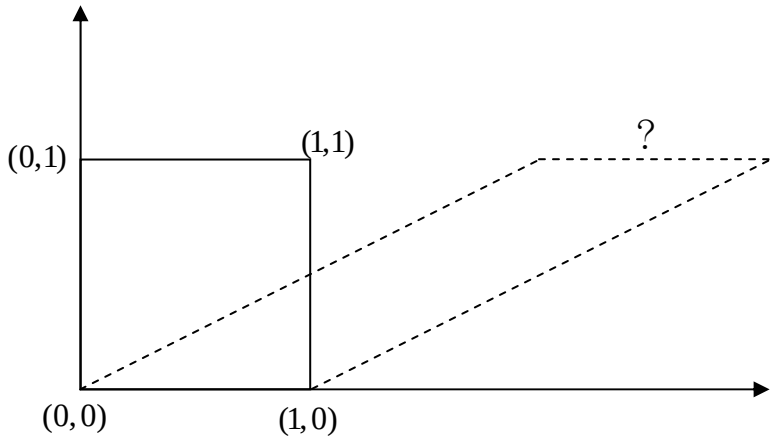
$$z=x+yi \rightarrow w=u+iv$$

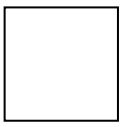
$$\sigma_1=\sqrt{2},\ \sigma_2=\frac{1}{\sqrt{2}}$$

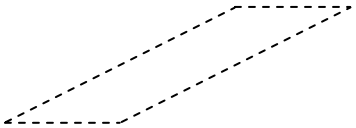
$$u+vi=e^{i\phi}F(e^{i\varphi}z)$$

where $\varphi=-45^\circ$, $\phi=30^\circ$

Find F, U, V, R, Φ, Ψ and plot the deformed shape of a unit square.







undeformed　　deformed