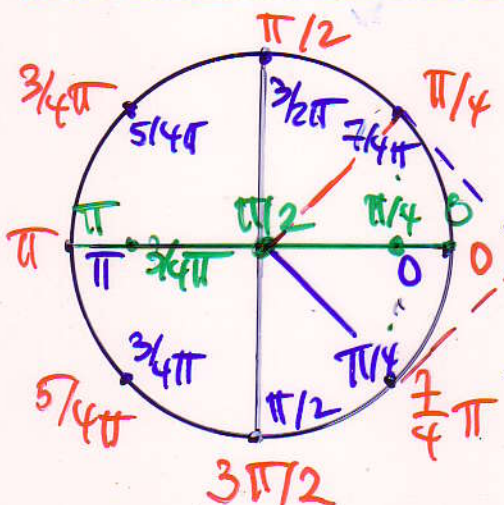


$$2 \cos t + j \sin t$$

$$= 2 \operatorname{Re} e^{jt} + j \operatorname{Im} e^{jt}$$

$$= e^{jt} + e^{-jt} + j \frac{1}{2j} (e^{jt} - e^{-jt})$$

$$= \frac{3}{2} e^{j\omega t} + \frac{1}{2} e^{-j\omega t}$$



$$\cos t = \frac{1}{2} (e^{jt} + e^{-jt})$$

$$2 \cos \pi/4 = \sqrt{2}$$