$$e^{i\frac{\pi}{4}} = \cos(\frac{\pi}{4}) + i\sin(\frac{\pi}{4}) = \frac{\sqrt{2}}{2} + i\frac{\sqrt{2}}{2} = \frac{\sqrt{2}}{2}(1+i)$$

phong Vo

$$(2)$$
 $\chi = 1+1 = 2$