$\alpha + \beta = \beta + \alpha \quad \forall \ \alpha, \beta \in \mathbb{C}$

Suppose $\alpha = a + bi$, $\beta = b + di$ $\quad a, b, c, d \in \mathbb{R}$

$$\begin{aligned} \alpha + \beta &= (a+bi) + (b+di) \\ &= (a+b) + (b+d)i \\ &= (b+a) + (d+b)i \\ &= \beta + \alpha \end{aligned}$$

□