Name:

1. Is the field extension \mathbb{C}/\mathbb{R} Galois? Is the field extension $\mathbb{Q}(\zeta_n)/\mathbb{Q}$ Galois for any n?

2. Is $\mathbb{Q}(\sqrt[3]{2})/\mathbb{Q}$ a Galois field extension?

3. What is the fixed field of $G(\mathbb{Q}(\zeta_n)/\mathbb{Q})$? What is the fixed field of $G(\mathbb{Q}(\sqrt[3]{2})/\mathbb{Q})$? What is the fixed field of the subgroup $H < G(\mathbb{Q}(\sqrt{2},\sqrt{3})/\mathbb{Q})$ consisting of the identity and the automorphism that conjugates $\sqrt{2}$?