Please PRINT your name _____

No calculators, cell phones, computers, notes, etc.

Make your work correct, complete and coherent.

Please take a picture of your quiz (for your records) just before you turn the quiz in. I will e-mail your grade and my comments to you. I will keep your quiz.

The quiz is worth 5 points. The solutions will be posted on my website later today.

Quiz 3, February 15, 2023

Let U_8 be the group of complex numbers which satisfy $x^8 = 1$. Find two subgroups of U_8 in addition to $\{\text{id}\}$ and U_8.

Answer: The subgroup $\langle i \rangle$ has order 4. The subgroup $\langle -1 \rangle$ has order 2.