Algebra II Winter 2021 — 15 January
Frank Sottile — First Homework for Frank

Write your answers neatly, in complete sentences. Revise your work before handing it in, and submit a .pdf created from a LaTeX source to Gradescope. Correct and crisp proofs are greatly appreciated; oftentimes your work can be shortened and made clearer.
Due on Monday, 25 January at 9 AM.

For Frank to grade:

1. Using, for example, that a polynomial over a field of degree d has at most d roots and the structure of cylcic groups (or any other legitimate methods), prove that any finite multiplicative subgroup of a field is cyclic.