Math 395 - Spring 2020 Homework 3

This homework is due on Wednesday, February 5.

All of these problems can be turned in by hand.

Section 14.3: 1, 4, 5, 9 Section 14.6: 2, 17 Section 14.8: 3

Also please solve problem 12 of Section 14.6, and then combine this result with that of problem 11 of the same section to give all the possibilities for the Galois group of the splitting field of the polynomial $x^4 + ax^2 + b$ (you do not need to prove that every possibility occurs, although if you are curious do look at problem 13)