

You will *not* be asked to prove the results below on the final exam:

1. Conjugacy is an equivalence relation.
2. Be able to construct the field of quotients of an integral domain and verify that the operations are well defined.
3. For any ring R , and any element a of R , $a \cdot 0 = 0$.
4. A polynomial of degree at most 3 in $F[x]$ is irreducible over F if and only if it has no zeros in F .
5. The Rational Root Theorem.
6. If $F \subset K \subset E$ are fields and $[E : K]$, and $[K : F]$ are finite, then $[E : F] = [E : K][K : F]$.