

Quiz 20A: Extension Fields

1. What is an extension field of a field F ?
2. What is the fundamental Theorem of Field Theory for a field F and non constant polynomial $f(x) \in F[x]$?
3. What is the point of the splitting field for $f(x)$ over F ?
4. (True/False) Let $f(x)$ be a nonconstant element of $F[x]$, where F is a field. Then sometimes there is no splitting field for $f(x)$ over F .