

Rings practice

cs235

December 5, 2018

1. Prove that the polynomial rings $\mathbf{Z}[x]$ and $\mathbf{Q}[x]$ are not isomorphic.
2. Prove that if $ab = 1$ in a Ring, then $ba = 1$ when a or b is not a Zero Divisor.
3. Is the Quotient Ring of an Integral Domain still an Integral Domain? Prove or disprove.