

M621 HW, due Nov 22.

A. Recall that if R is a ring, a non-empty subset S of R is a *subring* of R if for all $a, b \in S$, $ab \in S$ and $a - b \in S$.

B. We discussed ring homomorphisms in class—of course, a ring isomorphism is a bijective ring homomorphism, and two rings R and S are *isomorphic* if there exists an isomorphism $F : R \rightarrow S$.

1. pg. 230, number 4.

2. pg. 231, number 15.

3. pg. 247, number 1