Math 621 Spring 2013
Week 12: Integral Extensions

Major Definitions: integral element, integral closure, integrally closed, norm and trace

Major Theorems: a few nameless (but still important!) results

Exercises:
1 - 3. Do exercises 2, 3 and 8 on page 400.
4. Let $R$ be an integral domain with quotient field $K$ and let $\alpha$ be algebraic over $K$. Show that $r\alpha$ is integral over $R$ for some non-zero $r \in R$. 