1. Do problems 4.1.5, 4.1.6, 4.1.11, 4.1.19 in the textbook.
2. Do problems 4.2.5 (a)–(d), 4.2.14 in the textbook.
3. Let $R$ be a commutative ring with identity. Show that an element of $R[x]$ is nilpotent if and only if all its coefficients are nilpotent.