February 22, 2011

18.702 Problem Set 3

due Monday, February 28

1. Chapter 11, Exc. 2.2 and 3.10 *(formal power series)*

2. Chapter 11, Exc. 3.4 *(a homomorphism $\mathbb{C}[x, y] \to \mathbb{C}[t]$)*

3. Chapter 11, Exc. 6.8 *(Chinese Remainder Theorem)*

4. Chapter 11, Exc. 8.1 *(principal ideals in $\mathbb{Z}[x]$ that are maximal)*

5. Chapter 11, Exc. 9.12 *(polynomials without common zeros)*

6. Chapter 11, Exc. M.3 *(maximal ideals in a ring of sequences)*

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Spring 2011