Math 5385 – Homework III
Due Friday, October 22 (date of Midterm I)

From the text.

Section | Problems
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2.3     | 5, 7, 9
2.4     | 3, 8, 9, 10
2.5     | 7, 8, 13, 14, 15
2.6     | 2, 3, 5a., 6, 9a
2.7     | 3(use lex for a, grlex for b, both lex and grlex for c)

Hints: For problem 2.5.8, show that for any polynomial $a_1, a_2$, the leading term of $a_1(x, y)(x - z^2) + a_2(x, y)(y - z^3)$ has to be divisible by $x$ or $y$ (or by both).