# MATH 111 HOMEWORK 5, WINTER 2004

DUE FRIDAY, FEBRUARY 27

(1) CLO 2.9 #12
(2) CLO 2.9 #13
(3) CLO 3.1 #1
(4) CLO 3.1 #5
(5) CLO 3.1 #6
(6) CLO 3.5 #1
(7) **Bonus Question**. (Not compulsory). Let $S = \mathbb{C}[x]$, and let $f \in S$ have all coefficients rational. Let $f_{red}$ be the generator of $I(V(f))$ (with $LC(f_{red}) = 1$). Show that all coefficients of $f_{red}$ are rational. Hint: Think about the related previous homework question.