

**Homework 5**

Due April 21, 1997

1. Green & Limebeer, Problem 6.8.
2. Green & Limebeer, Problem 6.9.  
What is the point of this EASY problem? Give a brief interpretation.
3. Green & Limebeer, Problem 6.11.  
*Do only Parts 1 and 2.*  
The only if direction in Part 2 is difficult.  
This is an important result—it gives the minimal (optimal) achievable performance level  $\gamma$ .
4. Green & Limebeer, Problem 6.15.  
Don't get confused, this problem is VERY EASY.  
Notation:  $\mathcal{F}_l(G_2, -F_2) : z_1 \mapsto z_2$  and  $\mathcal{F}_u(G_1, -F_1) : z_2 \mapsto z_1$ .