

Main Points

- ▶ When zeros are in LHP, *high gain* can be used to stabilize the system (although one must worry about zeros at infinity).
- ▶ If there are zeros in RHP, high gain is always disastrous.
- ▶ PD control is effective for stabilization because it introduces a zero in LHP.

But: Rules A–C cannot tell the whole story. How do we know which way the branches go, and which pole corresponds to which zero?

Rules D–F!!