

Some Comments on the Routh Test

- ▶ The result ($\#(\text{RHP roots})$) is not affected if we multiply or divide any row of the Routh array by an arbitrary *positive* number.
- ▶ If we get a zero element in the 1st column, we can't continue. In that case, we can replace the 0 by a small number ε and apply Routh test to that. When we are done with the array, take the limit as $\varepsilon \rightarrow 0$. (see Ex. 3.33 in FPE)
- ▶ For an *entire row of zeros*, the procedure is a more complicated (see Example 3.34 in FPE) – we will not worry about this too much.