

ENEE 303 Fall 2012

Topics for the final exam.

1. CMOS inverter
 - a. Input-output characteristics
 - b. Transistor states and sizing
2. NMOS and NPN current mirrors
 - a. Biasing
 - b. Small signal equivalent
 - c. Transient response, C loaded
3. Small signal parameters from series expansion about Q point.
4. Load line and biasing
5. Stability of logic gate with multiple bias points
6. Voltage transfer functions; poles and zeroes