

E151 Lecture 13 Handout

What is the small signal impedance of a diode connected BJT?

What's a current mirror and why do we use them?

Draw a simple current mirror.

What are the four design parameters we study for current mirrors? What are they for a simple mirror?  
(include a derivation of epsilon.)

Draw a simple current mirror with a beta helper and record its design parameters

Which transistor is the beta helper? What is it doing? What single stage amplifier stage does it act like?

Draw a cascoded current mirror and record its design parameters