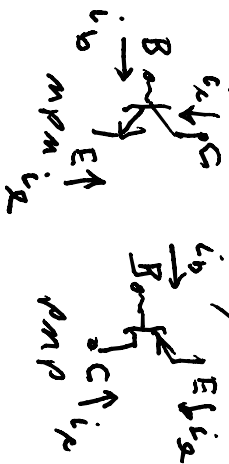


Transistors

BJT = Bipolar Junction Transistor

MOS = metal oxide silicon

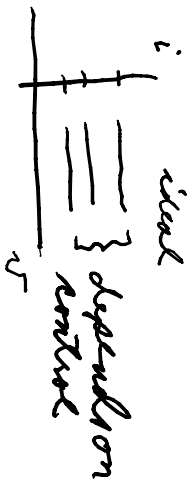
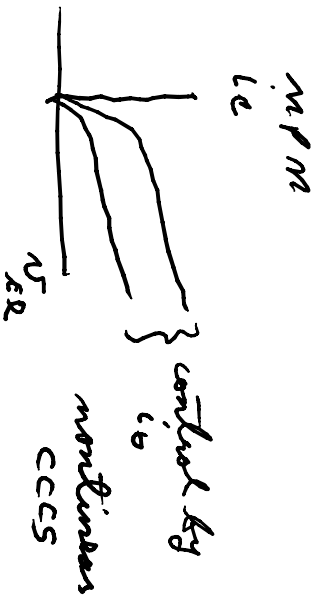
BJT npn  
pnp



E = emitter  
C = collector  
B = base

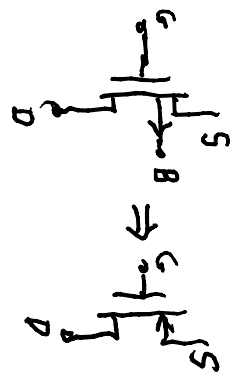
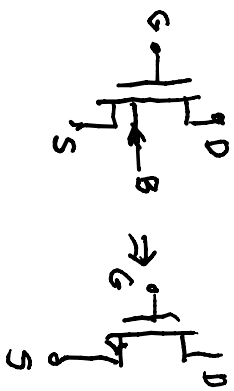
these are current controlled current sources

F component



nonlinear  
CCCS

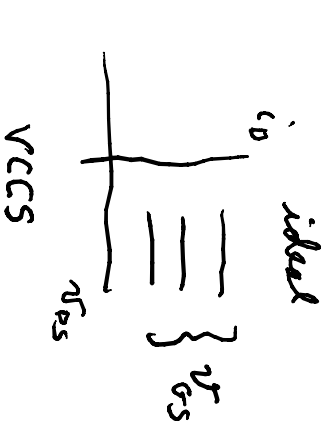
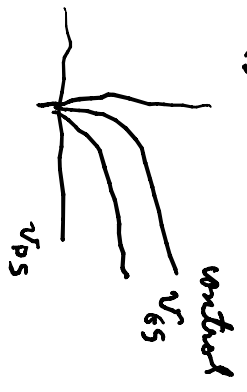
MOS  
NMOS  
PMOS



NMOS

PMOS

D = drain  
S = source  
G = gate  
B = bulk



ideal  
VCCS  
drain G component

Other next time  
find PS rises & learn where models

BICMOS12. Lit  
all  
} never before  
all