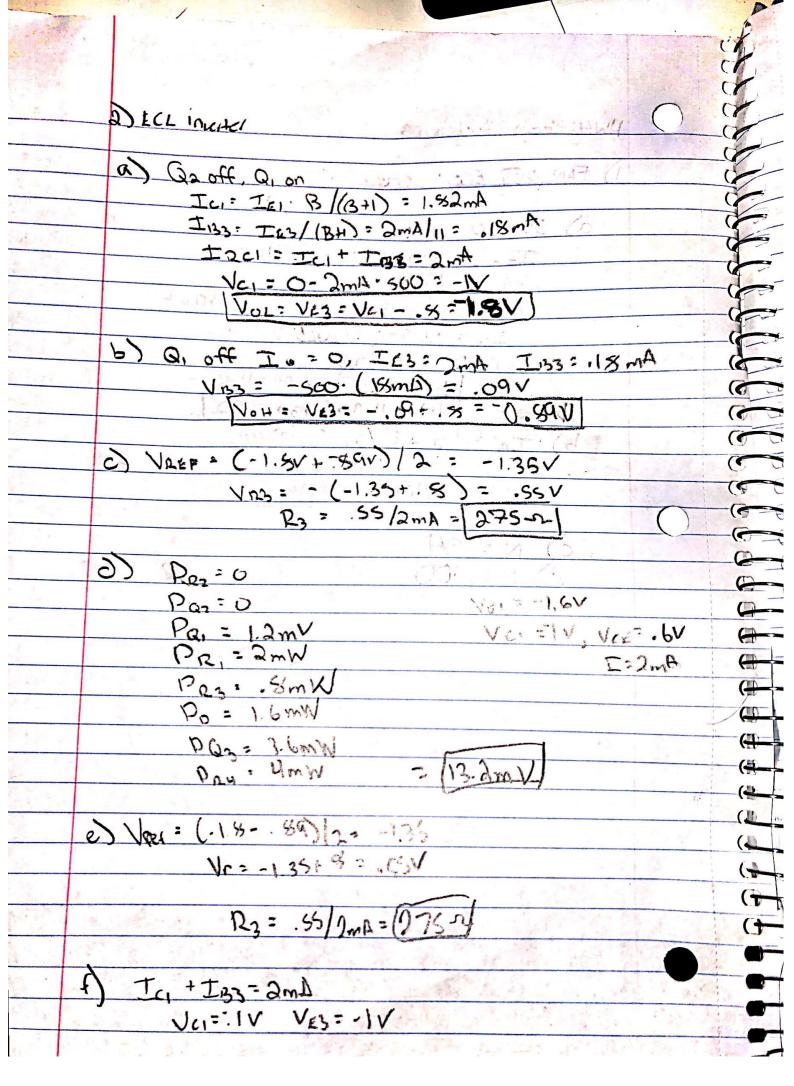
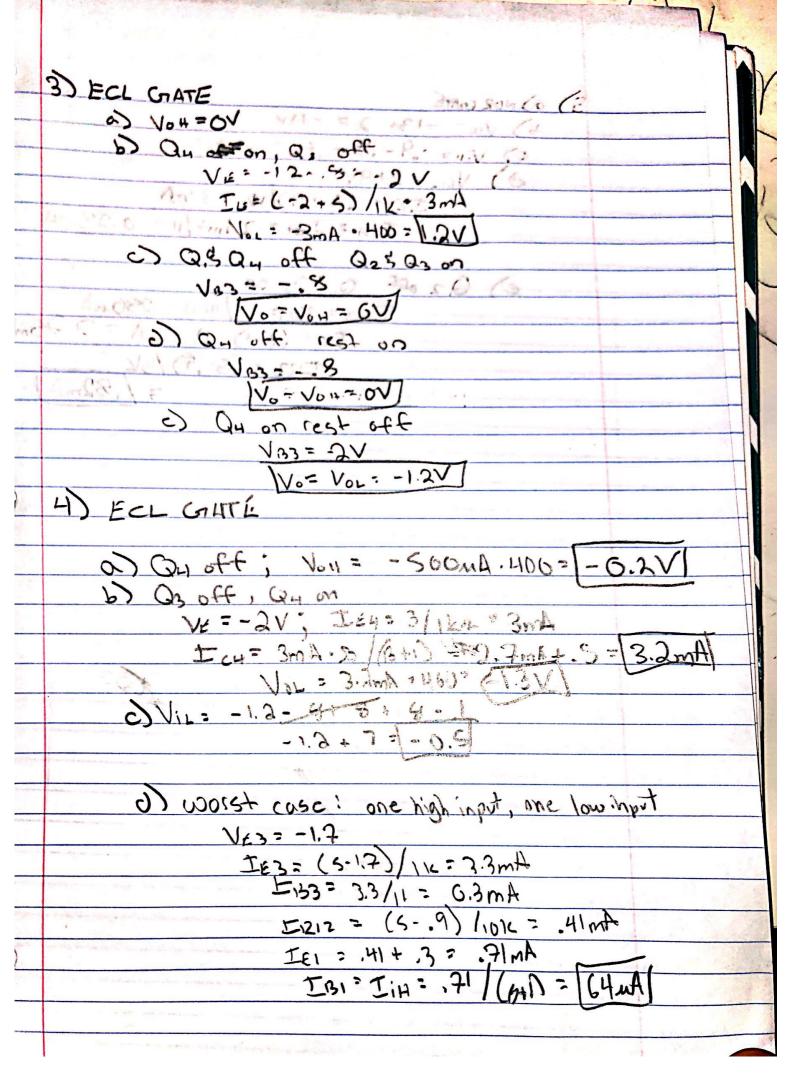
HW4: Keeyan Hochshenes FAN-OUT ECL IONCHERS a) B=20 Ic= -(-5+-7+9) = 2.94mA IB = IE/13+1= 2.74mA/21 = 130MA IZE = - (-5+.9)/2K1 = 2.05mA Te"= 14.01 mA Ten = 14.01 - 2.04 = 11.96mA N = 11.78/.130 = 92 N = 11.96/ 065 = 1196





```
S) a) MOR CHATE

b) VILT -13+.2=-11V

c) VILT -9-,2-,8=-1.9V

d) VEIZ = -1.9V

ICI = (5.1.9)/1k = 3.1mA

ILH = IBI = 3.1mA/11 = 0.25mA

E = (6.5 03 on

In3 = IDT -1/460 = 250mA

ILE = (6.1) . 250mA

E = (6.1) . 250mA

E = (8.1) . 250mA
```