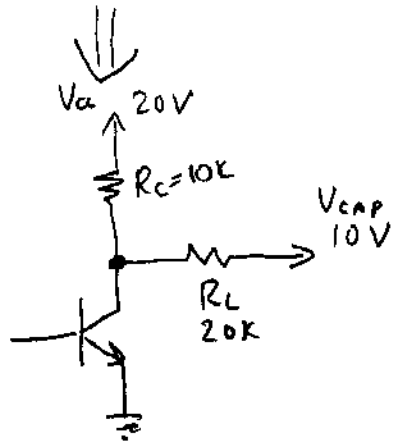
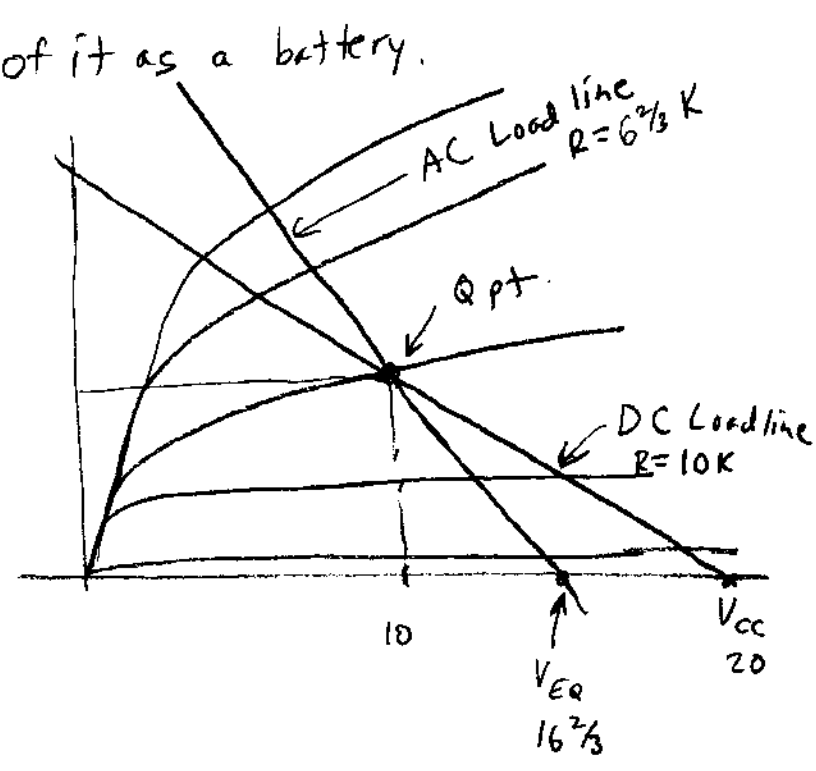
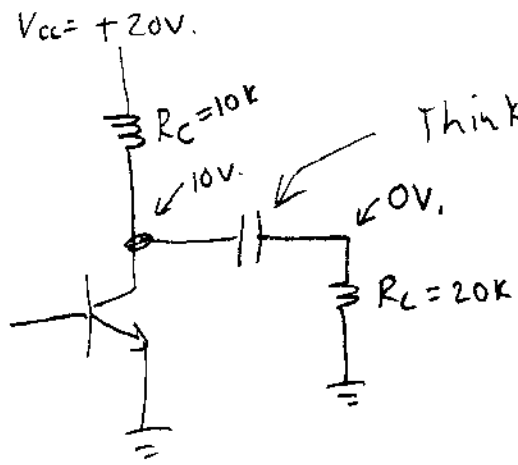


# AC Load line analysis

(actually using an AC load line)



$$V = V_{CAP} + \frac{(V_{CC} - V_{CAP}) R_L}{R_C + R_L} = 10 + \frac{(20 - 10)(20k)}{10k + 20k} = 10 + \frac{(10)(20k)}{30k}$$

$$= 10 + \frac{200k}{30k} = 10 + \frac{20}{3} = 10 + 6\frac{2}{3}$$

$$= \frac{R_C R_L}{R_C + R_L} = \frac{(10k)(20k)}{10k + 20k} = \frac{200 \text{ Meg}}{30k} = \frac{20}{3} k = 6\frac{2}{3} k$$

- p. 204 - 12, 13, 14, 15, 16
- p. 234 - 25, 28, 31