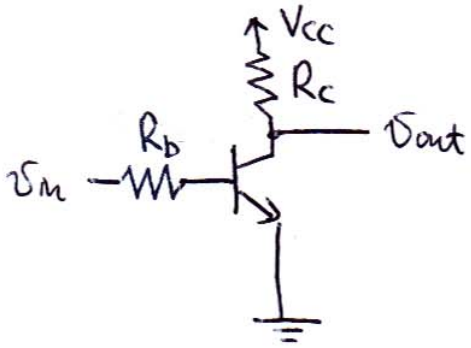
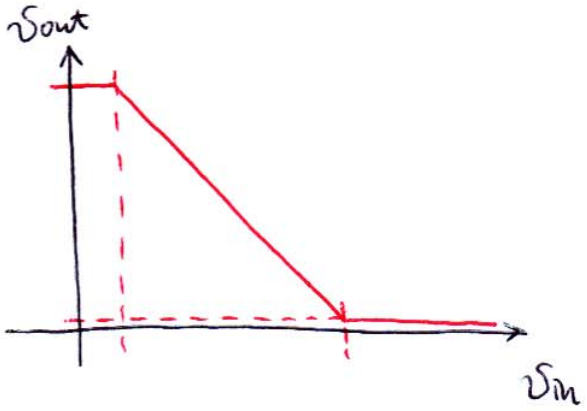
P3360 / AEP 3630

Lecture 17

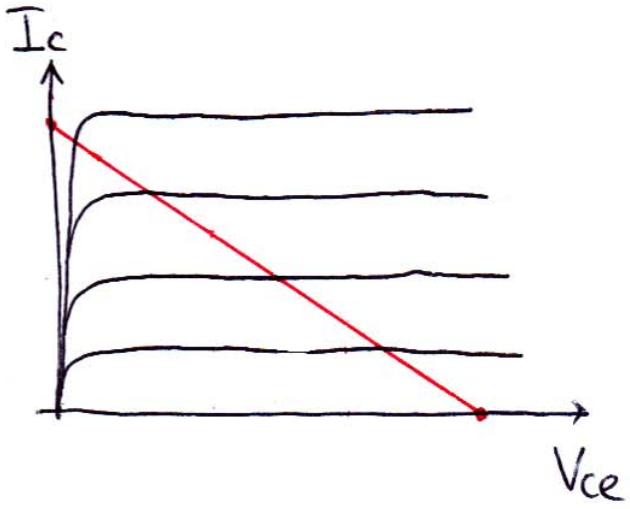
Transistor circuits (contd)





Transistor amplifier

suppose $i_b = I_{bo} + i_{b_1} \sin \omega t$



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Transistor biasing

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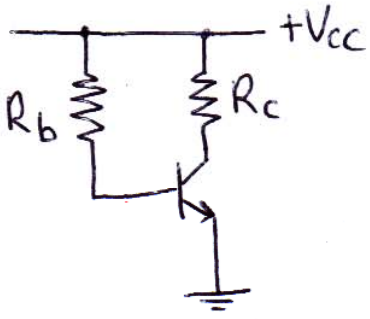
simple



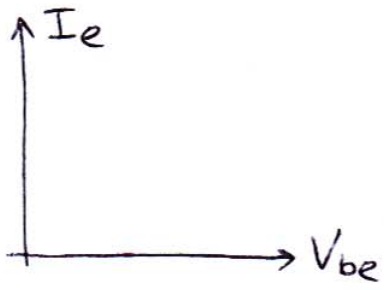
Problem:

Solution:

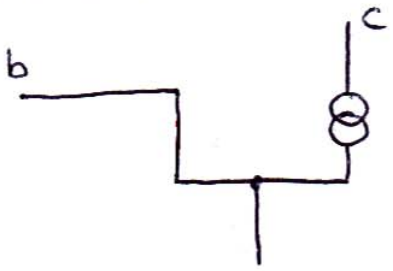
H-biasing

Transistor small signal equivalent

Recall $I_b = f(V_{be})$



equivalent circuit



Transistor circuit analysis

usually $\left|\frac{\Delta v}{V_{ce}}\right| \ll 1$, then analysis can be separated

1)

2)